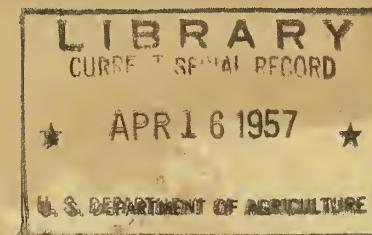


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FEDERAL - STATE COOPERATIVE
SNOW SURVEYS and WATER SUPPLY FORECASTS
for
OREGON

UNITED STATES DEPARTMENT of AGRICULTURE
SOIL CONSERVATION SERVICE
and
OREGON AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above
in cooperation with the Oregon State Engineer, U. S. Forest Service,
National Park Service and other Federal, State and local organizations.

AS OF
APR. 1, 1957

UNITED STATES DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

TO RECIPIENTS OF COOPERATIVE SNOW SURVEY
AND WATER SUPPLY FORECAST REPORTS:

Snow surveys in the west are conducted each year at more than 1200 snow courses. Basin and Province or State snow survey reports summarizing the results of the measurements and forecasts of seasonal runoff and water supply are issued by the Soil Conservation Service, U. S. Department of Agriculture and some of its co-operators; the Water Rights Branch of the British Columbia Department of Lands and Forests; and the California Division of Water Resources.

Copies of the various federal-state cooperative snow survey reports listed below may be secured by writing to:

Head, Water Supply Forecasting Section
Soil Conservation Service
209 S. W. 5th Avenue
Portland 4, Oregon

BASIN REPORTS:

Colorado, Rio Grande,.. Issued monthly February through May by SCS and Colorado and Platte-Arkansas Experiment Station, Fort Collins, Colorado.*
River Basins

Columbia River Issued monthly January through May by Soil Conservation Service, Boise, Idaho.*

Upper Missouri Issued monthly February through May by SCS and Montana Agricultural Experiment Station, Bozeman Montana.*
River Basin

West-Wide Water Issued April 1 by Soil Conservation Service and Co-
Supply Outlook Supply, Portland, Oregon.

STATE REPORTS:

Arizona Issued semi-monthly January 15 through April 1 by SCS and Salt River Valley Water Users Association, Phoenix, Arizona.*

Nevada Issued monthly February through April by SCS and Nevada State Engineer, Reno, Nevada.*

Oregon Issued monthly January through May by SCS, Portland, Oregon, and Oregon Agricultural Experiment Station.*

Utah Issued monthly January through May by SCS, Salt Lake City, Utah, and State Engineer of Utah and Utah Agricultural Experiment Station.*

Washington Issued monthly February through May by SCS, Spokane, Washington, and State Department of Conservation and Development.*

Wyoming Issued monthly February through May by SCS, Casper, Wyoming, and State Engineer of Wyoming.*

*Special reports are issued as needed.

The British Columbia reports are issued February 1 through June 1 and may be secured from Comptroller, Water Rights Branch, Department of Lands and Forests, Parliament Building, Victoria, B. C.

The California reports are issued monthly February 1 through May 1 and may be secured from Division of Water Resources, California Department of Public Works, Sacramento, California.

The annual water supply forecasts of the Weather Bureau are available in monthly bulletins published from January through May. These bulletins entitled, "Water Supply Forecasts for the Western United States" may be obtained from River Forecast Center, Weather Bureau, 712 Federal Office Building, Kansas City 6, Missouri.

FEDERAL-STATE COOPERATIVE
SNOW SURVEYS AND WATER SUPPLY FORECASTS
FOR
OREGON

Issued

April 8, 1957

Report Prepared

by

W. T. Frost, Snow Survey Supervisor
and
Manes Barton, Assistant Snow Survey Supervisor

Soil Conservation Service
and
Oregon Agricultural Experiment Station
209 S. W. 5th Avenue
Portland 4, Oregon

Issued by:

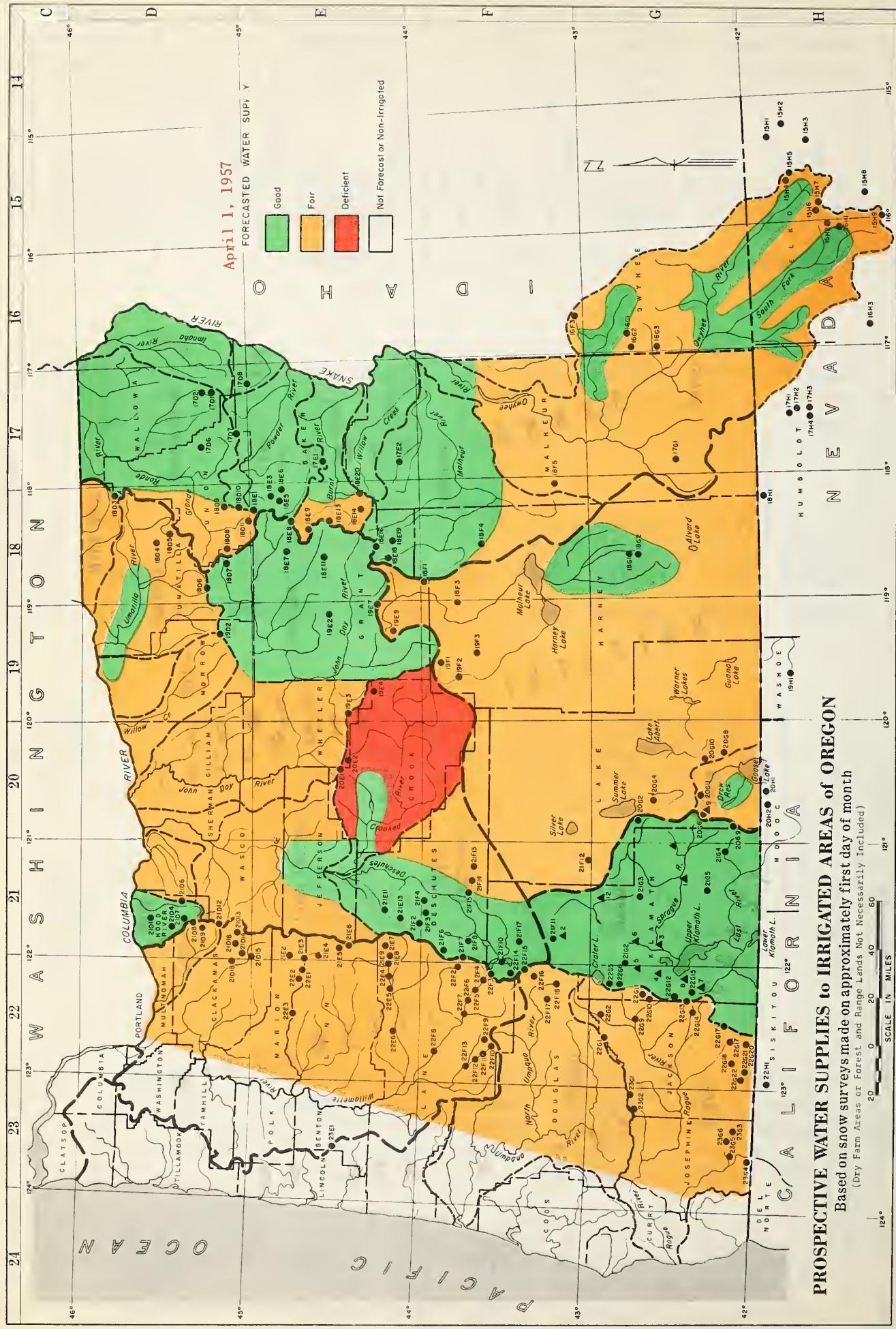
Thomas P. Helseth
State Conservationist
Soil Conservation Service

F. Earl Price
Director
Oregon Agricultural Experiment Station

TABLE OF CONTENTS

	<u>Page</u>
Prospective Water Supply Map	Facing 1
Snow Course Index	Back of Water Supply Map
Final Water Supply Outlook for Oregon	1
Oregon Streamflow Forecasts	2 - 6
Reservoir Location Map	Facing 7
Status of Oregon Reservoir Storage	7
Comparison of Snow Cover with that of Previous Years	8
Narrative Reports of Water Supply Outlook by areas	Begins 9
Foreward	9
Northcentral Oregon	9
Umatilla-Walla Walla	10
Northeastern Oregon	11
John Day Basin	12
Central Oregon	13
Harney	14
Southcentral Oregon	14
Klamath Basin	15
Rogue-Umpqua	16
Southeastern	18
Willamette Valley	19
Snow Survey Measurements	
April 1, 1957	Appendix 1 - 9
Delayed Data	Appendix 10 - 11
Current Oregon Streamflow	Appendix 12
Oregon Precipitation	Appendix 13
List of Cooperators	Last Page

Number	Name	Location	Elev.	Sec.	Top.	Rge.	Number	Name	Location	Elev.	Sec.	Top.	Rge.	Number	Name	Location	Elev.	Sec.	Top.	Rge.	
UPPER COLUMBIA DRAINAGE (Lower Snake in Oregon)																					
ONTHE RIVER BASIN																					
1855	Barren Valley	26	275	1200			1806	Lucy Strickle	28	35	225	5050		2251	DETROIT RIVER BASIN (Cont'd.)	1	105	58	1500/		
1854	Big Bend	(Ne)	30	405	555		1805	Macbeth	25	15	255	1300		2252	KLAMATH RIVER BASIN	1	105	58	1500		
1852	Biglife	(Ne)	30	405	555		1803	Tollgate	32	15	255	1300		2253	Oreorder Flat	30	175	58	1500		
1857	Fay Canyon	(Ne)	31	405	600		1804	Highway Camp	28	35	225	5050		2254	Forreille Lake	7	105	58	1500		
1855	Gold Creek	(Ne)	31	405	600		1802	Arbuckle Mountain	33	15	295	5100		2255	Gaber	21	135	75	2755		
1701	Highway Camp	(Ne)	31	405	600		1801	Jack Creek, Lower	28	35	225	5050		2256	Hogg Pass	21	135	75	2755		
1651	Jack Creek, Lower	(Ne)	31	405	600		1800	Macbeth	32	15	255	1300		2257	Hwy Prairie Reservoir	21	135	75	2755		
1652	Jack Creek, Upper	(Ne)	31	405	600		1802	Beach Creek, Summit	31	15	295	5100		2258	Lake of the Woods	21	135	75	2755		
1653	Jewly Ranch	(Ne)	31	405	600		1803	Big Creek	31	15	295	5100		2259	Lake Headquarters	6	215	55	1900		
1656	Radio Flat	(Ne)	31	405	600		1804	Big Creek	31	15	295	5100		2260	Quartz Reservoir	2	185	55	1650		
1653	Silver City	(Ne)	31	405	600		1805	Blue Mountain Spring	21	15	255	5000		2261	Seven Lakes No. 1	206	215	65	1650		
1659	Taylor Canyon	(Ne)	31	405	600		1806	Blue Mountain Spring	21	15	255	5000		2262	Seven Lakes No. 2	(Cal.)	21	155	65	1650	
1857	South Mountain No. 2	(Ne)	31	405	600		1807	Blue Mountain Spring	21	15	255	5000		2263	State Line	206	215	65	1650		
1851	South Mountain No. 2	(Ne)	31	405	600		1808	Blue Mountain Spring	21	15	255	5000		2264	Strawberry	202	215	65	1650		
1857	South Mountain No. 2	(Ne)	31	405	600		1809	Blue Mountain Spring	21	15	255	5000		2265	Summer Rain	21	155	65	1650		
1851	South Mountain No. 2	(Ne)	31	405	600		1810	Blue Mountain Spring	21	15	255	5000		2266	Sun Mountain	21	155	65	1650		
1851	South Mountain No. 2	(Ne)	31	405	600		1811	Blue Mountain Spring	21	15	255	5000		2267	Taylor Butte	2163	165	55	1650		
MIDDLE RIVER BASIN																					
1851	Big Creek	(Ne)	31	405	600		1801	Big Creek	28	35	225	5100		2268	INTERIOR DRAINAGE						
1851	Big Creek	(Ne)	31	405	600		1802	Big Creek	28	35	225	5100		2269	GOOSE LAKE BASIN						
1851	Big Creek	(Ne)	31	405	600		1803	Big Creek	28	35	225	5100		2270	Cascade Creek	206	215	55	1650		
1851	Big Creek	(Ne)	31	405	600		1804	Big Creek	28	35	225	5100		2271	Cox Flat	20031	155	55	1650		
1851	Big Creek	(Ne)	31	405	600		1805	Big Creek	25	15	295	5100		2272	Crowder Mountain	206	215	55	1650		
1851	Big Creek	(Ne)	31	405	600		1806	Big Creek	21	15	255	5100		2273	Deer Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1807	Big Creek	21	15	255	5100		2274	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1808	Big Creek	21	15	255	5100		2275	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1809	Big Creek	21	15	255	5100		2276	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1810	Big Creek	21	15	255	5100		2277	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1811	Big Creek	21	15	255	5100		2278	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1812	Big Creek	21	15	255	5100		2279	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1813	Big Creek	21	15	255	5100		2280	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1814	Big Creek	21	15	255	5100		2281	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1815	Big Creek	21	15	255	5100		2282	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1816	Big Creek	21	15	255	5100		2283	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1817	Big Creek	21	15	255	5100		2284	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1818	Big Creek	21	15	255	5100		2285	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1819	Big Creek	21	15	255	5100		2286	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1820	Big Creek	21	15	255	5100		2287	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1821	Big Creek	21	15	255	5100		2288	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1822	Big Creek	21	15	255	5100		2289	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1823	Big Creek	21	15	255	5100		2290	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1824	Big Creek	21	15	255	5100		2291	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1825	Big Creek	21	15	255	5100		2292	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1826	Big Creek	21	15	255	5100		2293	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1827	Big Creek	21	15	255	5100		2294	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1828	Big Creek	21	15	255	5100		2295	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1829	Big Creek	21	15	255	5100		2296	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1830	Big Creek	21	15	255	5100		2297	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1831	Big Creek	21	15	255	5100		2298	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1832	Big Creek	21	15	255	5100		2299	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1833	Big Creek	21	15	255	5100		2300	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1834	Big Creek	21	15	255	5100		2301	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1835	Big Creek	21	15	255	5100		2302	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1836	Big Creek	21	15	255	5100		2303	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1837	Big Creek	21	15	255	5100		2304	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1838	Big Creek	21	15	255	5100		2305	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1839	Big Creek	21	15	255	5100		2306	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1840	Big Creek	21	15	255	5100		2307	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1841	Big Creek	21	15	255	5100		2308	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1842	Big Creek	21	15	255	5100		2309	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1843	Big Creek	21	15	255	5100		2310	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1844	Big Creek	21	15	255	5100		2311	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1845	Big Creek	21	15	255	5100		2312	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1846	Big Creek	21	15	255	5100		2313	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1847	Big Creek	21	15	255	5100		2314	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1848	Big Creek	21	15	255	5100		2315	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1849	Big Creek	21	15	255	5100		2316	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1850	Big Creek	21	15	255	5100		2317	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1851	Big Creek	21	15	255	5100		2318	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1852	Big Creek	21	15	255	5100		2319	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	405	600		1853	Big Creek	21	15	255	5100		2320	Dead Horse Creek	13	165	65	1650		
1851	Big Creek	(Ne)	31	4																	



PROSPECTIVE WATER SUPPLIES to IRRIGATED AREAS of OREGON

Based on snow surveys made on approximately first day of month
(Dry Farm Areas, or Forest and Range Land, Not Necessary to
Plant, Not Irrigated)

(Dry Farm Areas or Forest and Range Lands Not Necessarily Included)

SCALE IN MILES

WATER SUPPLY OUTLOOK
FOR OREGON

April 1, 1957

Oregon's irrigation water supply during the next six months will range from "fair" to "excellent". Deficient irrigation water supplies are anticipated only in portions of the Crooked River Basin and in some of the small watersheds which head below the mountain snow zone. Most irrigation reservoirs are filled or can be filled in the next few weeks. Mountain and valley soils are well wetted.

SNOW-COVER: Water content of mountain snow increased markedly during March. Whereas last month snow cover was only 62 percent normal, it is now 83 percent normal. Increases in some of the major stream basins is even more striking: Owyhee, from 67 percent last month up to 107 percent this month; Crooked, from 31 percent up to 78 percent; Harney Basin, from 60 percent up to 110 percent.

Most of the snow is gone below 4500 feet in eastern Oregon and below 3500 feet in western Oregon.

SOIL MOISTURE: Well above normal October precipitation, which fell as snow in the higher elevations and then melted in November; plus above normal March precipitation has left both valley and mountain soils well wetted. Except for some minor ice lenses on the ground surface, mountain soils under the snow are not frozen.

RESERVOIRED WATER: Over two-thirds of Oregon's twenty larger irrigation reservoirs are filled to capacity. None are less than 85 percent full except McKay which is 70 percent of capacity. Storage in these reservoirs is 134 percent of the 1938-52 average.

PRECIPITATION: Statewide, March precipitation¹ averaged about 193 percent of the 15 year average. September-March precipitation was about 93 percent average.

STREAMFLOW: An adequate supply of irrigation water is foreseen for most of Oregon. In areas where "poor" to "fair" supplies are anticipated every effort should be made to utilize the available water efficiently.

Just prior to the issuance of this report, a series of ten water meetings were held throughout Oregon. A detailed synopsis of these meetings will be found beginning on page 9. Water supplies on nearly all streams which supply irrigation water are considered.

March streamflow² was above normal. It ranged from 200 percent on the Willamette River at Albany to 133 percent on the Hood River near Hood River.

¹From preliminary data furnished by U. S. Weather Bureau, Portland, Ore.

²From preliminary data furnished by U. S. Geological Survey, Portland, Ore.

FINAL OREGON STREAMFLOW FORECASTS - APRIL 1, 1957

The following summarized runoff forecasts are based principally on mountain snow cover and on the assumption that precipitation and temperature during the forecast period will be near average. Appreciable deviations from normal of temperature and/or precipitation during the forecast period will correspondingly modify these forecasts.

Basin, Stream and Station	Forecast Runoff 1957	Seasonal Streamflow in Thousands of Acre Feet				15 - Yr. Average 1938-52
		% 15-Yr. Avg.	Fore- cast Period	Measured Runoff* 1955	Runoff* 1954	
Columbia River nr. The Dalles**	103,890.0	107	Apr-Sept.	99400.0	116986.0	97006.0
UPPER COLUMBIA BASIN LOWER SNAKE IN OREGON						
<u>Owyhee River Basin</u>						
Owyhee Reservoir net Inflow ¹	400.0	87	Apr-Sept.	250.3	73.7	457.6
	385.0	88	Apr-July	231.8	70.3	439.8
<u>Malheur River Basin</u>						
Malheur River, nr. Drewsey	94.0	115	Apr-Sept.	36.7	44.4	81.5
Malheur River, N.Fk., at Beulah ²	73.0	114	Apr-Sept.	35.1	45.9	63.9
<u>Burnt River Basin</u>						
Burnt River, nr. Hereford ³	36.0	86	Apr-Sept.	18.2	23.0	41.8
<u>Powder River Basin</u>						
Powder River, nr. Baker	64.0	101	Apr-Sept.	32.9	39.9	63.4
	63.0	102	Apr-July	32.1	38.4	61.6
<u>Imnaha River Basin</u>						
Imnaha River at Imnaha	275.0	91	Apr-Sept.	255.8	253.7	303.4
<u>Grande Ronde River Basin</u>						
Wallowa River, E.Fk., nr. Joseph ⁴	10.5	93	Apr-Sept.	10.3	11.3	11.3
	8.5	92	Apr-July	8.3	8.9	9.2
Hurricane Creek, nr. Joseph	38.0	84	Apr-Sept.	40.9	43.1	45.1
Lostine River, nr. Lostine	116.0	94	Apr-Sept.	103.8	118.5	123.5
Bear Creek, nr. Wallowa	64.0	93	Apr-Sept.	62.3	63.9	69.1
Catherine Creek, nr. Union	74.0	104	Apr-Sept.	52.1	50.6	71.1
Grande Ronde River, at LaGrande	125.0	71	Apr-Sept.	181.4	122.3	176.9

*Discharge data from preliminary records of U.S. Geological Survey and Oregon State Engineer. Most 1956 records not available at this time.

**Forecast by Boise Office, Soil Conservation Service. Corrected for storage.

¹From U.S.B.R. records of inflow.

²Observed flow / change in storage in Agency Valley Reservoir.

³Observed flow plus change in storage in Unity Reservoir.

⁴Includes power plant tailrace.

Streamflow Forecasts - April 1, 1957 (Cont'd.)

Basin, Stream and Station	Forecast Runoff 1957	Seasonal Streamflow in Thousands of Acre Feet			15 - Yr. Average 1938-52	
		% 15-Yr. Avg.	Fore- cast Period	Measured Runoff* 1955	Runoff* 1954	
LOWER COLUMBIA BASIN						
<u>Umatilla River Basin</u>						
Umatilla River, nr. Gibbon	80.0	92	Apr-Sept.	106.6	72.6	86.8
Umatilla River, at Pendleton	155.0	92	Apr-Sept.	215.2	117.7	167.4
McKay Creek nr. Pilot Rock	142.0	92	Apr-July	210.4	111.5	154.5
	19.0	68	Apr-Sept.	44.3	17.0	27.8
	18.7	68	Apr-July	44.3	16.9	27.6
<u>Walla Walla River Basin</u>						
Walla Walla R., So. Fk., nr. Milton	58.0	82	Apr-Sept.	71.3	68.7	70.5
	48.0	83	Apr-July	58.7	54.6	57.8
<u>John Day River Basin</u>						
Strawberry Cr. nr. Prairie City	7.6	92	Apr-Sept.	7.2	7.7	8.3
John Day River at Prairie City	48.0	95	Apr-Sept.	37.6	42.5	50.4
John Day River, Mid.Fk. at Ritter	43.0	95	Apr-July	33.4	37.5	45.3
	118.0	97	Apr-Sept.	90.9	92.8	121.7
John Day River, N.Fk., nr. Dale	240.0	97	Apr-Sept.	165.2	229.7	248.4
<u>Crooked River Basin</u>						
Crooked R., nr. Post	80.0	64	Apr-Sept.	77.8	70.5	124.2 ^d
Ochoco Res., net inflow ⁵	17.0	61	Apr-Sept.	13.2	18.6	28.0
<u>Deschutes River Basin</u>						
Crescent Creek at Crescent Lake ⁶	21.0	99	Apr-Sept.	26.5	43.0	21.2
Little Deschutes R., nr. Lapine ⁶	73.0	81	Apr-Sept.	69.1	134.4	89.6
	65.0	82	Apr-July	61.0	117.8	79.1
Odell Cr., nr. Crescent	30.0	103	Apr-Sept.	28.7	37.5	29.2
Deschutes River, below Snow Creek	55.0	91	Apr-Sept.	45.8	80.8	60.4
Crane Prairie Res. inflow ⁷	108.0	90	Apr-Sept.	94.1	149.9	120.6

*Discharge data from preliminary records of U. S. Geological Survey and Oregon State Engineer. Most 1956 records not available at this time.

⁵Observed flow of Ochoco Cr. / Canal / changes in storage of Ochoco Res.

⁶Observed flow / changes in storage of Crescent Lake Reservoir.

⁷From State Engineer's file #3220a, tabulating total inflow to Crane Prairie Reservoir and outflow, showing the loss in the Reservoir.

^d1938-39 excepted.

Streamflow Forecasts - April 1, 1957 (Cont'd.)

Basin, Stream and Station	Forecast Runoff 1957	Seasonal Streamflow in Thousands of Acre Feet				15 - Yr. Average 1938-52		
		% 15-Yr. Avg.	Fore- cast Period	Measured Runoff* 1955	Runoff* 1954			
<u>Deschutes River Basin</u>								
(Continued)								
Deschutes River at Benham Falls ⁸	485.0	95	Apr-Sept	575.8	697.9	511.0		
	330.0	95	Apr-July	379.5	469.0	346.3		
Tumalo Creek, nr. Bend ⁹	42.0	87	Apr-Sept.	48.6	59.8	48.3		
Squaw Creek nr. Sisters	45.0	91	Apr-Sept.	46.7	62.7	49.3		
White River, below Tygh Valley	125.0	82	Apr-Sept.	170.5	176.3	152.0		
	110.0	82	Apr-July	151.8	157.7	134.7		
<u>Hood River Basin</u>								
Hood River, W. Fk., nr. Dee	132.0	90	Apr-Sept.	211.4	197.8	146.9		
	115.0	90	Apr-July	185.2	172.4	127.3		
Hood River, nr. Hood River ¹⁰	270.0	88	Apr-Sept.	424.0	399.4	306.1		
	230.0	89	Apr-July	358.6	343.1	259.7		
<u>Willamette River Basin</u>								
Row River, nr. Dorena	83.0	83	Apr-Sept.	168.9	84.5	100.5		
	80.0	83	Apr-July	164.0	78.8	96.1		
Mid.Fk. Willamette R. blw.No.Fk.nr.Oakridge	765.0	96	Apr-Sept	1071.0	823.1	798.3		
	675.0	96	Apr-July	699.4	699.6	704.5		
McKenzie R., at McKenzie Bridge	515.0	91	Apr-Sept.	689.8	668.8	564.7		
	390.0	91	Apr-July	527.3	497.4	429.9		
McKenzie River, nr. Vida	1080.0	90	Apr-Sept.	1574.6	1336.4	1194.7		
	880.0	90	Apr-July	1310.4	1064.0	978.0		
South Santiam at Waterloo	520.0	93	Apr-Sept	973.5	592.6	558.0		
	490.0	93	Apr-July	929.9	532.0	524.6		
North Santiam at Mehama ¹¹	775.0	92	Apr-Sept.	1122.9	955.4	841.5		
	685.0	92	Apr-July	944.8	742.6	748.0		
Willamette River at Salem ¹¹	4300.0	99	Apr-Sept.	7039.2	4902.3	4354.5		
	3850.0	100	Apr-July	6195.1	3985.3	3863.4		
Clackamas River, at Big Bottom	140.0	86	Apr-Sept.	198.9	201.3	163.6		
	115.0	87	Apr-July	164.2	164.0	132.5		
Oak Grove Fk. abv. Power Intake	160.0	86	Apr-Sept.	203.6	217.8	185.7		
	125.0	86	Apr-July	160.0	168.8	145.3		
Clackamas River abv. Three Lynx	510.0	85	Apr-Sept.	812.0	722.7	599.3		
	430.0	85	Apr-July	705.2	616.4	507.4		
Clackamas River nr. Cazadero	680.0	87	Apr-Sept.	1079.4	932.4	777.2		
	600.0	89	Apr-July	946.8	793.9	668.7		

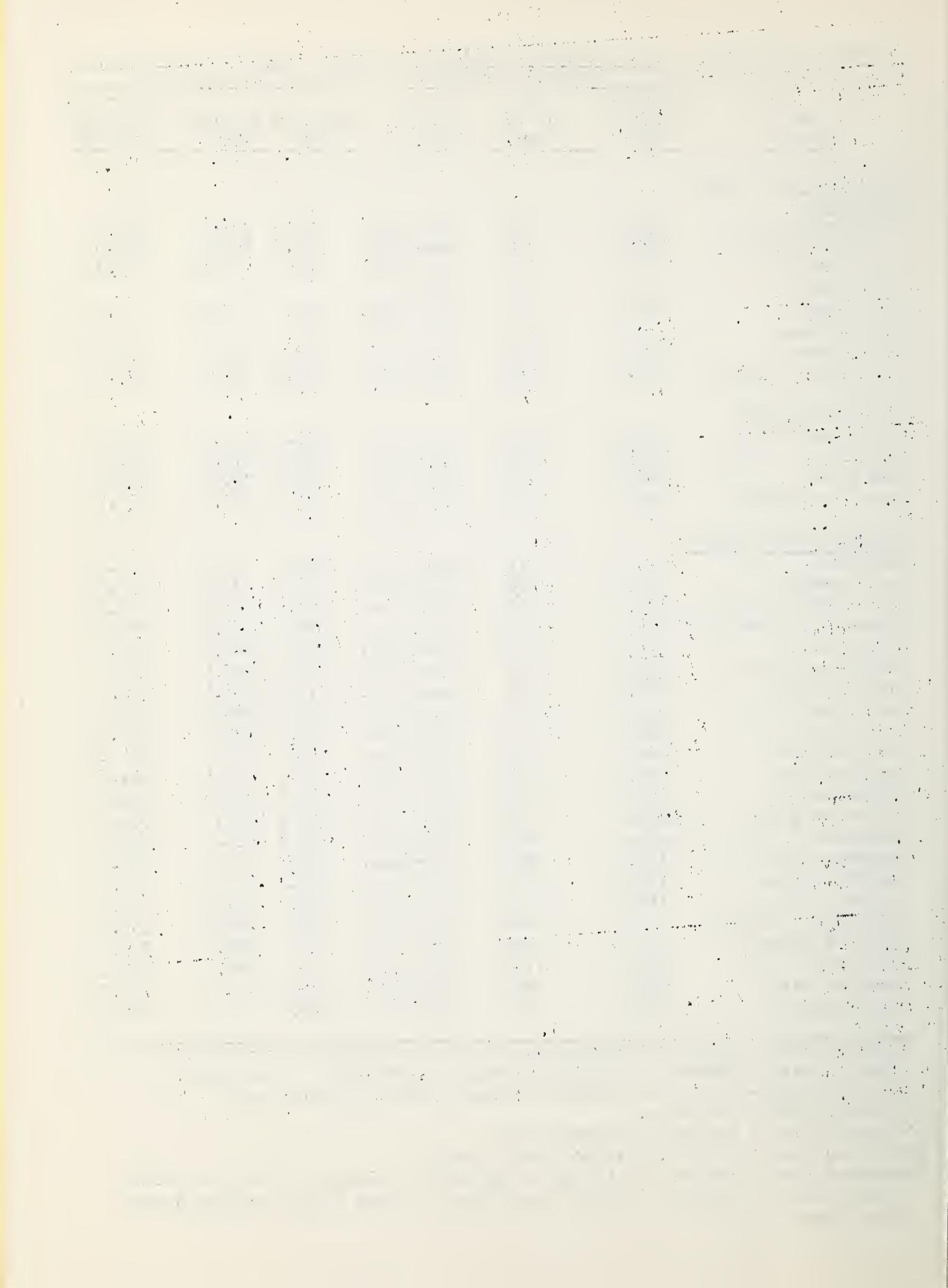
*Discharge data from preliminary records of U. S. Geological Survey and Oregon State Engineer. Most 1956 records not available at this time.

⁸Observed flow + changes in storage in Crane Prairie, Wickiup and Crescent Lake Reservoirs.

⁹Observed flow + Columbia Southern Canal.

¹⁰Observed flow plus P. P. & L. Co. power canal.

¹¹Observed flow + changes in storage in any of the following reservoirs which are above the station: Lookout Point, Detroit, Fern Ridge, Cottage Grove and Dorena.



Streamflow Forecasts - April 1, 1957 (Cont'd.)

Basin, Stream and Station	Forecast Runoff 1957	Seasonal Streamflow in Thousands of Acre Feet				15 - Yr. Average 1938-52
		% 15-Yr. Avg.	Fore- cast Period	Measured Runoff* 1955	Runoff* 1954	
OREGON AND CALIFORNIA COAST BASINS						
Umpqua River Basin						
No. Umpqua River, ¹² below Lake Creek	146.0	89	Apr-Sept.	146.2	218.0	164.0
Clearwater River, above Trap Creek	55.0	86	Apr-Sept.	69.9	86.2	64.2
Rogue River Basin						
Hyatt Res., net Inflow ¹³	No Snow Surveys Made		Apr-Sept.	3.0	6.4	6.0
Fournile Lake, net Inflow ¹⁴	7.0	100	Apr-Sept.	8.3	3.5	7.0
Little Butte Cr., N. Ek. ¹⁵ below Fish Lake ¹²	14.0	94	Apr-Sept.	23.9	25.6	14.9
Rogue R., So. Fk., nr. Prospect ¹⁶	70.0	92	Apr-Sept	71.4	78.4	76.1
	60.0	92	Apr-July	60.8	65.5	65.1
Rogue R. Mid. Fk., nr. Prospect ¹⁷	69.0	93	Apr-Sept.	73.8	83.0	74.3
	55.0	94	Apr-July	58.4	64.3	58.7
Rogue River, above Prospect	280.0	88	Apr-Sept.	307.6	375.1	316.5
	235.0	89	Apr-July	257.1	305.9	265.1
Rogue River, below South Fork	615.0	90	Apr-Sept.	653.0	741.2	680.8
	500.0	90	Apr-July	531.4	588.9	553.0
Rogue River, at Raygold nr. Central Point	815.0	90	Apr-Sept.	839.8	987.3	905.6
	685.0	90	Apr-July	702.7	803.8	760.7
Rogue River, at Grants Pass	775.0	91	Apr-Sept.	859.1	967.9	852.8 ^d
Applegate River, nr. Copper	100.0	86	Apr-Sept.	80.4	154.7	116.0 ^d
Illinois River, at Kerby	168.0	93	Apr-Sept.	194.5	191.7	181.2

*Discharge data from preliminary records of U. S. Geological Survey and Oregon State Engineer. Most 1956 records not available at this time.

¹²Observed flow plus storage changes in Lemelo #1 Reservoir.

¹³Observed flow of Keene Creek at Hyatt Prairie plus storage changes plus 1600 a.f. for estimated evaporation during April-September period.

¹⁴Observed outflow into Cascade Canal plus storage changes plus 1600 a.f. for estimated evaporation during April-September period.

¹⁵Observed flow plus changes in storage in Fish Lake Reservoir plus 90% of Cascade Canal inflow.

¹⁶Observed flow plus South Fork Power Canal.

¹⁷Observed flow plus Middle Fork Power Canal.

^d1938 excepted.

Streamflow Forecasts - April 1, 1957 (Cont'd.)

Seasonal Streamflow in Thousands of Acre Feet

Basin, Stream and Station	Forecast Runoff 1957	% 15-Yr. Avg.	Fore- cast Period	Measured Runoff* 1955 1954	15 - Yr. Average 1938-52
<u>Klamath River Basin</u>					
Sprague River, nr. Chiloquin	285.0	113	Apr-Sept.	155.1	351.1
Williamson River, below Sprague R.	495.0	122	Apr-Sept.	346.9	406.0
Upper Klamath Lake, net Inflow ¹⁸	410.0	120	Apr-July	277.6	553.9
Upper Klamath Lake, net Inflow ¹⁸	640.0	122	Apr-Sept.	409.6	834.5
Clear Lake Res., net Inflow	515.0	121	Apr-July	320.4	687.1
Clear Lake Res., net Inflow	42.0	85	Apr-Sept.	34.8	26.0
Gerber Res., net Inflow	20.0	83	Apr-Sept.	12.0	17.5
GREAT BASIN INTERIOR DRAINAGE					
<u>Goose Lake Basin</u>					
Drew Reservoir, net Inflow	24.0	79	Apr-July	13.3	28.3
<u>Warner Lake Basin</u>					
Twentymile Cr. nr. Adel	13.0	62	Apr-June	12.1	8.9
Deep Cr., above Adel	50.0	74	Apr-June	43.2	56.0
Honey Cr., nr. Plush	11.0	71	Apr-June	7.9	13.7
<u>Chewaucan River Basin</u>					
Chewaucan River, nr. Paisley	59.0	81	Apr-June	27.6	97.8
<u>Malheur and Harney Lakes Basin</u>					
Trout Cr., nr. Denio	10.0	104	Apr-Sept.	4.1	3.5
Donner und Blitzen R., nr. Frenchglen	75.0	113	Apr-Sept.	54.9	45.0
Silvies River, nr. Burns	80.0	78	Apr-Sept.	42.0	51.7
102.3					

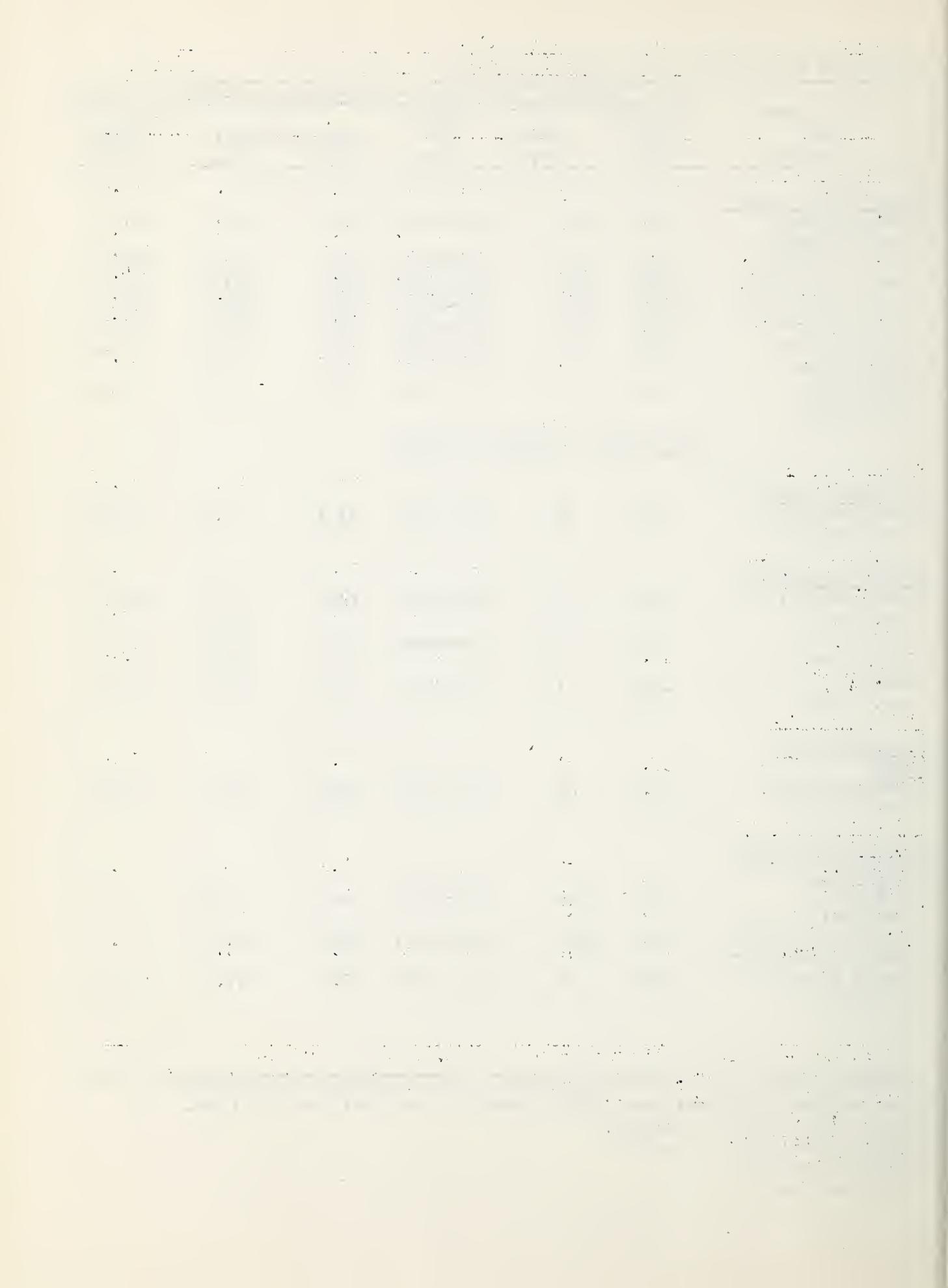
* Discharge data from preliminary records of U. S. Geological Survey and Oregon State Engineer. Most 1956 records not available at this time.

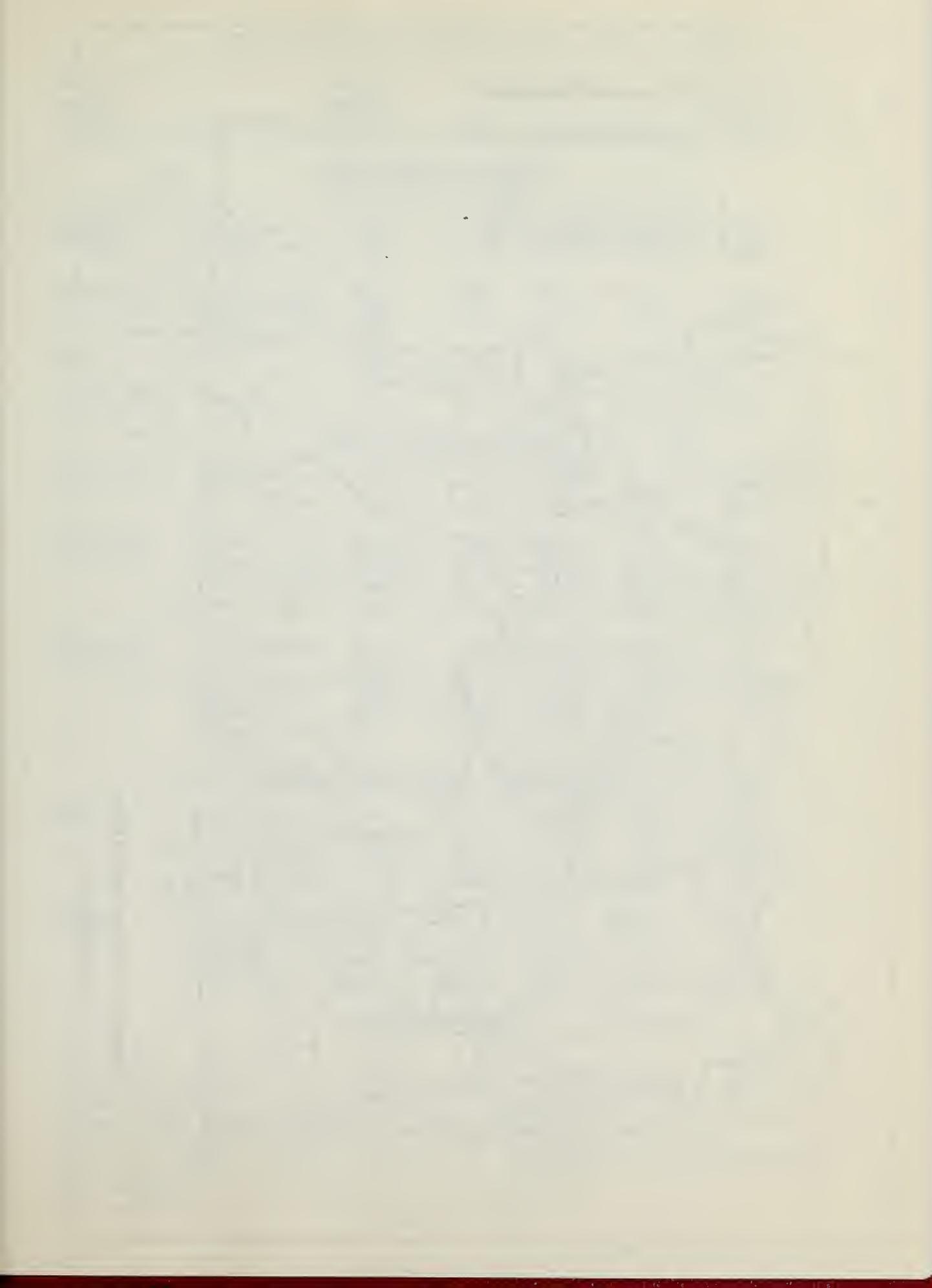
¹⁸From COPCO records of inflow.

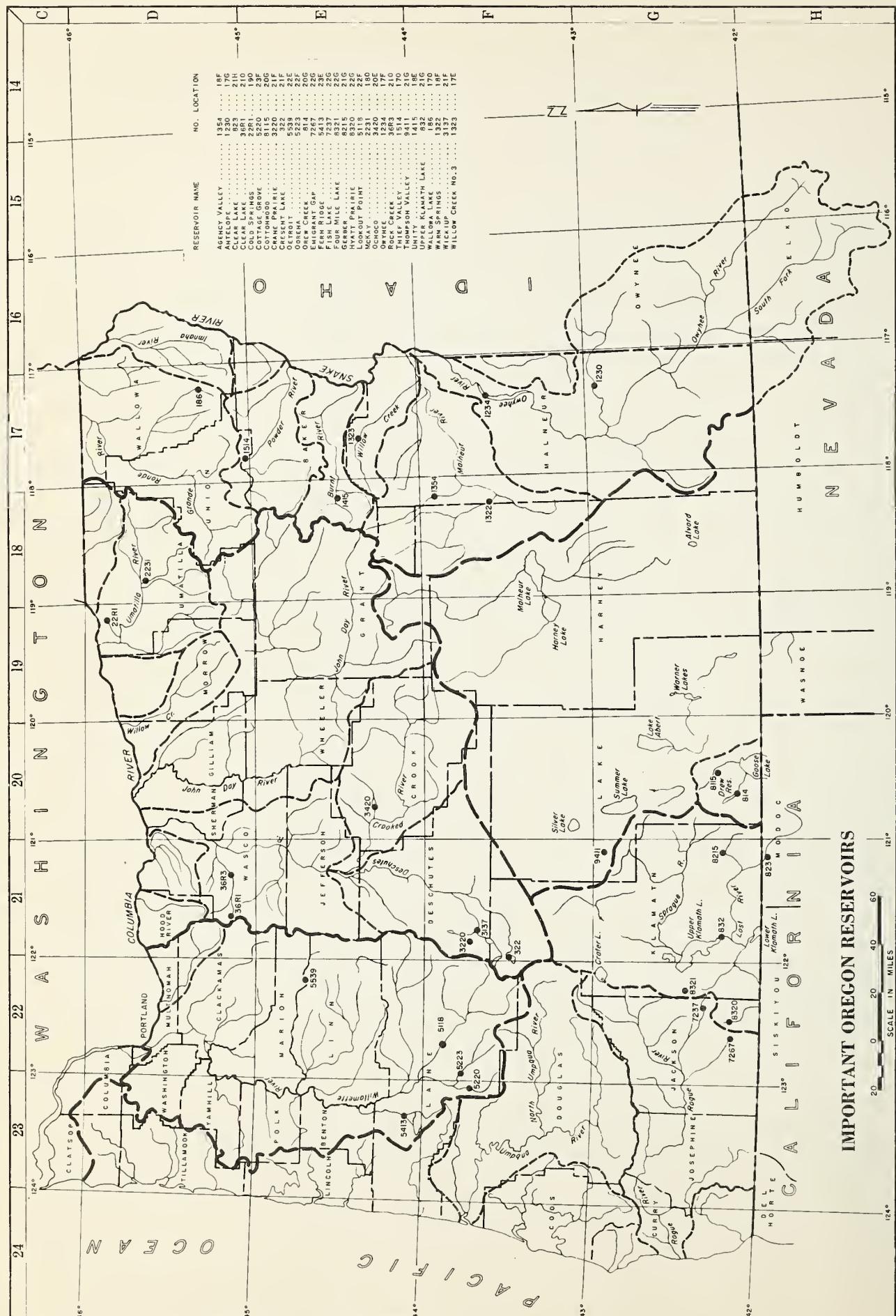
d 1942-43 and 1945 excepted.

e 1938-40 excepted.

f 1942 excepted.







IMPORTANT OREGON RESERVOIRS

SCALE IN MILES

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

M. 824

7

STATUS OF OREGON RESERVOIR STORAGE - APRIL 1, 1957

BASIN and/or STREAM	RESERVOIR	USABLE CAPACITY 1000s AF	USABLE STORAGE - 1000 ACRE FEET					
			1957	1956	1955	15-Yr. Avg. 1938-52		
<u>UPPER COLUMBIA DRAINAGE</u>								
<u>Lower Snake in Oregon</u>								
<u>Owyhee</u>	Antelope	36.5	N.R.	32.1	3.4	18.4		
	Owyhee	715.0	696.6	540.9	209.2	590.3		
<u>Malheur</u>	Warm Springs	191.0	193.0	115.2	33.7	121.1		
	Agency Valley	60.0	58.7	49.4	27.7	49.8		
<u>Burnt</u>	Unity	25.2	22.0	18.3	4.5	14.9		
<u>Grande Ronde</u>	Wallowa Lake	40.9	35.6	23.2	18.4	20.3		
<u>LOWER COLUMBIA DRAINAGE</u>								
<u>Umatilla</u>	McKay	74.0	52.4	57.9	20.2	58.9		
	Cold Springs	50.0	45.2	49.4	42.3	48.2		
<u>Deschutes</u>	Ochoco	46.0	44.7	41.7	23.2	28.3		
	Crescent Lake	68.0	68.1	52.9	23.1	42.1		
	Crane Prairie	55.3	58.7	43.4	49.0	38.4		
	Wickiup	200.0	200.4	199.8	194.2	112.3 ^b		
<u>Willamette</u>	Cottage Grove	30.1 ^a	17.9	16.4	17.2	16.6 ^b		
	Dorena	70.5 ^a	40.7	36.4	40.6	- -		
	Fern Ridge	94.2 ^a	72.7	62.1	71.2	56.3 ^c		
	Detroit	340.0 ^a	217.3	126.4	74.2	- -		
	Lookout Point	350.0 ^a	215.4	167.9	169.1	- -		
<u>OREGON AND CALIFORNIA COAST DRAINAGE</u>								
<u>Rogue</u>	Fish Lake	7.8	7.6	5.1	5.6	5.0		
	Fourmile Lake	16.1	16.6	N.R.	9.9	7.5		
	Emigrant Gap	8.3	8.3	7.2	3.0	8.0		
	Hyatt Prairie	16.1	16.6	7.2	10.3	6.7		
<u>Klamath</u>	Upper Klamath	584.0	524.3	453.2	469.8	448.2		
	Lake							
	Gerber	94.0	87.3	77.0	36.8	47.6 ^d		
	Clear Lake	440.2*	396.0	430.8	235.6	236.6 ^d		
<u>INTERIOR DRAINAGE</u>								
<u>Goose Lake</u>	Cottonwood	4.1	3.9	2.1	1.2	1.4 ^e		
	Drew	62.5	63.9	59.0 ^f	28.8	48.8		

N.R.--No Report.

^aStorage space reserved for flood control.

^b1938-42 excepted.

^c1938-41 excepted.

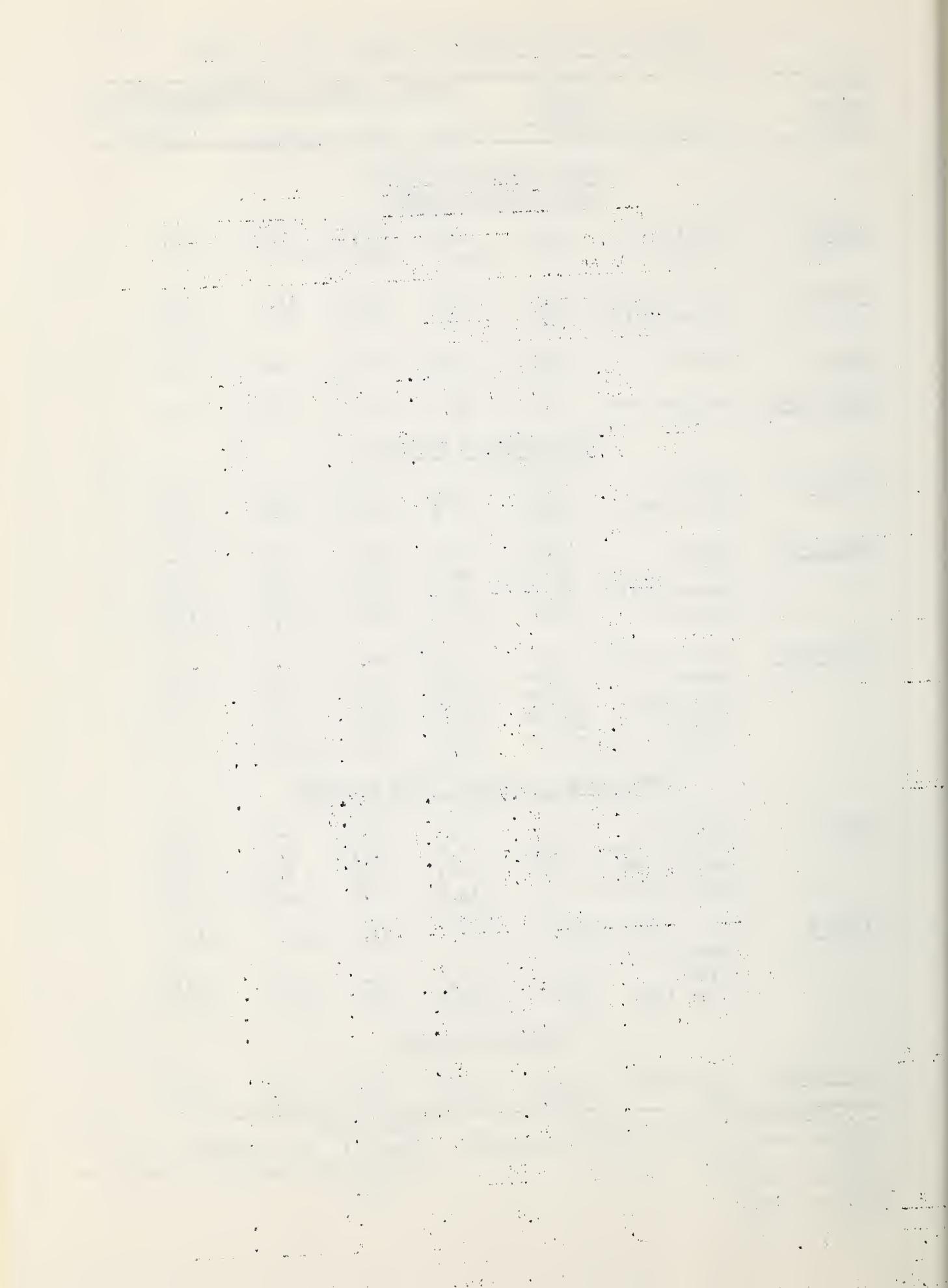
^d1938 excepted.

^e1942 excepted.

^fEstimated

^gMarch 1, 1957 reading

^{*}Flashboards increase capacity to 513.0.



COMPARISON OF SNOW COVER WITH THAT OF PREVIOUS YEARS

The following tabulation of Oregon stream basins presents the water content of the snow about April 1, 1957, as percent of the same date in 1956 and 1955 and average.

DRAINAGE	No. of Courses Averaged	Yrs. Used 1938-52 Avg.	April 1, 1957 Water Content as percent of		
			1956	1955	1938-52 Average
			UPPER COLUMBIA DRAINAGE (Lower Snake in Oregon)		
Owyhee River	18-19	8-15	110	138	107
Malheur River	6-7	8-15	82	100	92
Burnt River	5-6	8-15	79	95	92
Powder River	7-8	5-15	76	108	93
Pine Creek	1	15	90	126	101
Imnaha River	2	11-15	61	124	87
Grande Ronde River	11-12	6-15	71	94	96
Wallowa River	2	11-15	61	124	87
Catherine Creek	2	15	90	108	105
Main Grande Ronde	7	6-15	73	84	99
<u>LOWER COLUMBIA DRAINAGE</u>					
Walla Walla River	1	15	76	80	86
Umatilla River	4	15	65	57	82
Willow Creek	1	15	51	55	72
John Day River	13	6-15	78	99	100
North Fork	5	6-15	73	93	104
Middle Fork	4	14-15	77	110	100
Main Branch	4	15	76	108	96
South Fork	2	9-15	102	112	101
Crooked River	4	9-15	82	98	78
Deschutes River	11-20	5-15	53	85	81
Hood River	6	5-15	50	67	71
Willamette Valley	13-35	12-15	42	58	78
Sandy River	3	14-15	45	60	75
Clackamas River	3-6	12-15	35	45	67
Santiam Rivers	3-7	14	39	56	76
McKenzie River	3-8	14	42	55	83
Middle Fork	4-10	12-15	49	72	82
Coast Fork	1-5	15	27	37	60
<u>OREGON AND CALIFORNIA COAST DRAINAGE</u>					
Umpqua River	5	5-15	43	63	62
Rogue River	8-11	9-15	47	111	79
Upper Rogue	4	9-15	65	122	84
Bear-Little Butte Creek	Insufficient Snow Surveys				
Applegate River	3	15	43	101	83
Illinois River	2	15	26	67	60
Klamath Lake Basin	13	7-15	53	120	76
Williamson River	11	7-15	55	124	78
Sprague River	7	12-15	33	93	58
Gerber-Clear Lake Basin	3	12-15	17	36	28
<u>INTERIOR DRAINAGE</u>					
Goose Lake Basin	4	12-15	24	52	41
Warner Lake Basin	1	14	37	74	59
Guano Lake Basin	1	13	43	30	35
Silver Lake Basin	1	12	0	0	0
Chewaucan River	3	14-15	38	121	76
Harney Basin	9-10	9-15	95	126	110
Alvord Lake Basin	1	5	55	148	56
McDermitt Creek	1	5	55	148	56

IRRIGATION WATER SUPPLY FORECASTS

SEASON OF 1957

- Foreward -

Measurements of snow depth and water content were secured by Soil Conservation Service personnel and many cooperators on 151 Oregon snow courses as near April 1 as practicable.

Water supply information, including forecasts, was developed and presented to water users at each of ten meetings in important irrigated regions of the State as follows:

March 7 - Southeastern Oregon - Vale
March 27 - Northcentral Oregon - The Dalles
March 28 - Umatilla-Walla Walla - Hermiston
March 29 - Northeastern Oregon - La Grande
March 30 - John Day Basin - Canyon City
April 1 - Central Oregon - Prineville
April 2 - Harney Basin - Burns
April 3 - Southcentral Oregon - Lakeview
April 4 - Klamath Basin - Klamath Falls
April 5 - Rogue-Umpqua - Grants Pass

These water meetings were jointly sponsored by the U. S. Soil Conservation Service, Oregon Agricultural Experiment Station, Oregon Extension Service and other cooperators.

The following paragraphs summarize the information presented at these meetings except for the one held at Vale. Data here presented for the Vale meeting are corrected to the April 1st outlook.

- Forecasts -

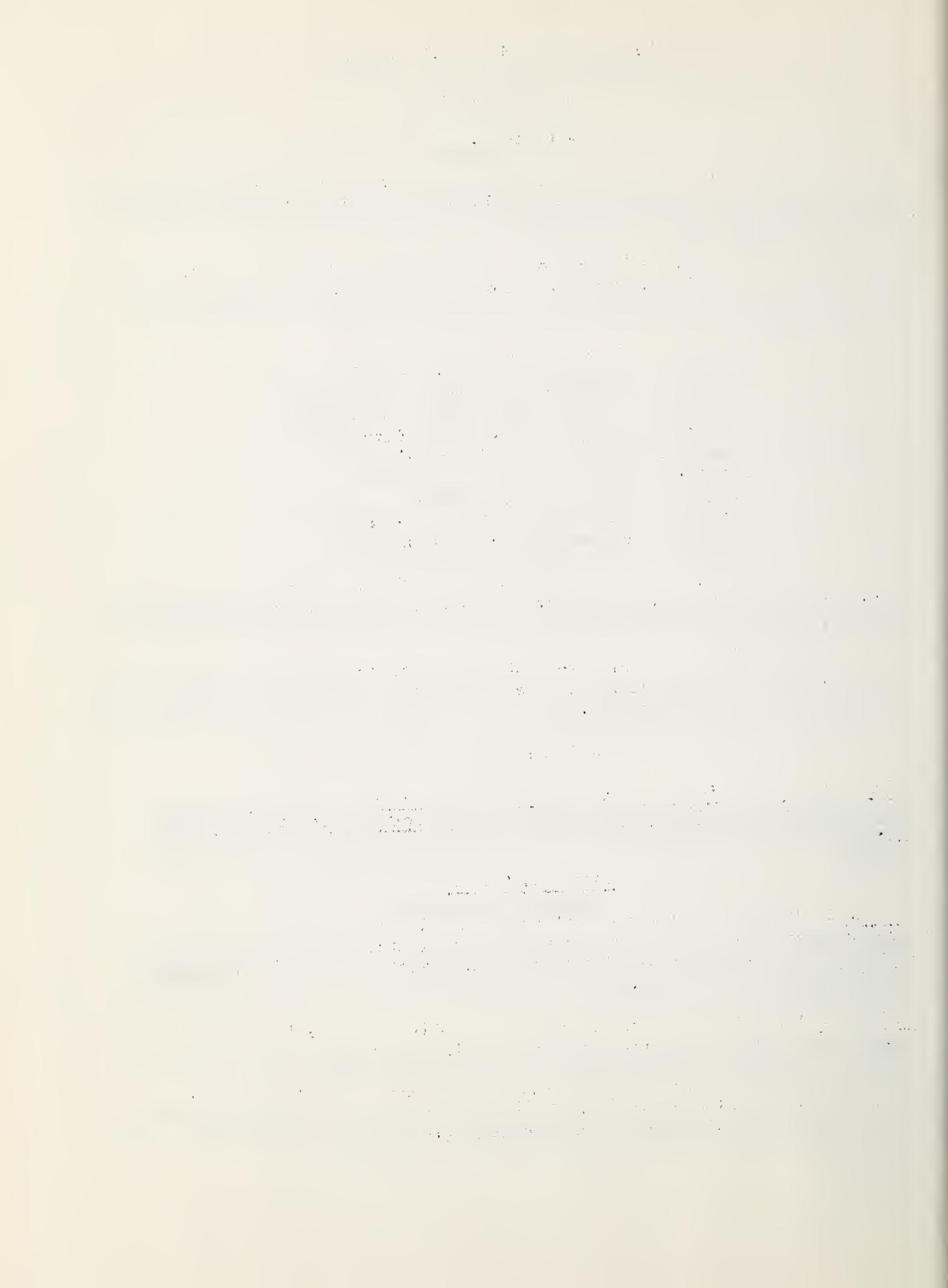
Modification of these forecasts may be required later in accordance with departures of precipitation and temperature from normal during the runoff season.

Northcentral Oregon

Snow-cover in the Hood River-Wasco watersheds is 71 percent of the 15 year average but only half of that present a year ago at this date. Watershed Soil Moisture is very favorable for a good runoff with most soils reported to be well wetted or saturated.

Hood River Valley will have good water supplies this season with streamflow forecast between 88 and 90 percent average for this area.

Discharge of Hood River, West Fork near Dee is forecast to be 132,000 acre feet April through September or 115,000 acre feet April through July. These flows will be 90 percent of the 15 year average (1938-52).



Discharge of the East Fork and Middle Fork is not measured but should be sufficient for good water supplies.

Flow of Hood River at Hood River is forecast to be 270,000 acre feet or 88 percent average for the April-September period. The April-July flow is forecast at 230,000 acre feet.

Lands on the West Side of Hood River Valley, served from Greenpoint Reservoirs, should have good water supplies. Snow at the Greenpoint Snow Course has a water content of 20.8 inches compared with only 11.1 inches just one month back.

In the Wasco County area, irrigation from Mill Creek, Fifteenmile, and Eightmile Creeks will be about normal. Cut-offs could come slightly early but the excellent soil moisture condition is favorable to good runoff.

Rock, Gate, Badger and Tygh Creeks should have a near normal flow. Both the Rock Creek and Badger Reservoirs are now filled.

Streamflow from Clear Creek, Lost and Boulder Creeks is expected to be slightly down from the average but water for the Juniper Flat area should be sufficient until about the middle of July.

Flow of White River below Tygh Valley is forecast at 125,000 acre feet for the April-September period. This will be 82 percent of the average. The April-July flow is estimated to be about 110,000 acre feet or 82 percent average.

Flow of Trout and Hay Creeks, in southern Wasco and western Jefferson Counties, will be close to average but some cutoffs will be earlier than usual unless early summer rains are favorable.

Umatilla-Walla Walla Basin

Snow-cover is below average in this area and distributed as follows: Walla Walla, 86 percent; Umatilla, 82 percent; and Willow Creek, 72 percent of average. Watershed soils are fairly well wetted but in some areas the moisture has not penetrated nearly as deep as it did a year ago.

Flow of the Walla Walla River, South Fork for the April-September period is forecast at 58,000 acre feet or 82 percent average. The April-July period is forecast to bring 48,000 acre feet or 83 percent of the average. This should provide sufficient irrigation water for all lands except for the late water rights served from the Hudson Bay and Pleasant View Canals.

Umatilla River near Gibbon is forecast to discharge 80,000 acre feet or 92 percent average April through September. The flow of the Umatilla River at Pendleton is forecast at 155,000 acre feet or 92 percent average for the April-September period. The first four months of flow, April through July, should bring about 142,000 acre feet or 92 percent of the average. This will be a good supply for most lands served from this source.

Cold Springs Reservoir, which provides off-stream storage for 50,000 acre feet of Umatilla River water, now has about 40,000 acre feet in storage compared

with 49,400 acre feet at this date last year. Part of this difference is due to a serious break in the feeder canal preventing any water delivery during a key 28 day period. This reservoir is now receiving about 400 acre feet a day through the feeder canal. This daily supply will need to continue well into June to satisfy all irrigation needs.

McKay Creek near Pilot Rock is forecast to discharge about 19,000 acre feet from April through September or only 68 percent of the average. Practically all of this amount will be received in the first four months.

McKay Reservoir, with about 49,500 acre feet in storage, compared to 57,900 acre feet last year, will provide only a "tight" supply of water for lands it serves this season.

Water supplies for the Stansfield, Westland and Hermiston Districts will be sufficient only with careful use and with the usual May-June rains.

Birch, Butter, Willow, Rhea and Rock Creeks are expected to discharge somewhat below normal with the possibility that many lands may receive only one irrigation. Butter Creek has already made a fine flow and good use has been made of that water.

Northeastern Oregon

Snow-cover is generally near normal and varies from 87 percent average in the Wallowa Mountains to 105 percent on Catherine Creek on the east side of Grande Ronde Valley. Watershed Soil-Moisture is very good to excellent throughout this area of Oregon and favors a good runoff.

Burnt River near Hereford is forecast to flow 36,000 acre feet April through September or 86 percent of the average flow. Unity Reservoir is reported to be releasing water although it has not yet been filled. A full reservoir would provide good water supplies downriver. There will likely be some water shortages above the reservoir unless unusually favorable rainfall occurs in the May-August period.

Powder River near Baker is forecast to flow 64,000 acre feet or 101 percent average for the April-September period. Nearly all of this flow will come in the next four months and should provide good average water supplies.

Rock, Pine, Goodrich, Salmon and other west side streams should provide about average water supplies.

North Powder River, Anthony and Wolf Creeks will probably provide water supplies that are about average. Shaw Reservoir is already filled.

Thief Valley Reservoir is filled again as is usual.

Eagle and Pine Creeks may possibly produce slightly above average water supplies this season.

The Imnaha River at Imnaha is forecast to flow 275,000 acre feet or 91 percent of its usual April-September discharge.

All Wallowa River tributaries will flow somewhat below average in the April-September period but no shortage of water supplies are foreseen except the usual late season deficiencies on Alder Slope.

Wallowa River, East Fork is forecast to discharge 10,500 acre feet or 93 percent average April through September. The April-July period will bring 8,500 acre feet. A satisfactory inflow to Wallowa Lake seems assured to add to the approximately 35,000 acre feet now in storage.

Hurricane Creek is forecast to flow about 84 percent average or 38,000 acre feet during the April-September period.

Lostine River near Lostine is forecast at 94 percent average or 116,000 acre feet for the irrigation season.

Bear Creek near Wallowa is forecast to flow 64,000 acre feet April through September. This will be 93 percent average.

The Grande Ronde Valley will have adequate water from Catherine Creek but the flow of the Main Grande Ronde River will be below average enough to cause some shortages.

Catherine Creek near Union will discharge about 74,000 acre feet or 104 percent of the April-September average.

Indian Creek and Ladd Creek will produce average amounts of water this season.

Grande Ronde River at La Grande is forecast to discharge about 125,000 acre feet April through September. This flow will be about 71 percent average and will cause some late season shortages.

John Day Basin

Snow-cover is average on this basin. This is rather remarkable since it was only two-thirds average just one month ago. Soil Moisture is excellent this year, favoring a good runoff.

Strawberry Creek near Prairie City is forecast at 7,600 acre feet or 92 percent of the usual April-September flow.

John Day River at Prairie City is forecast at 48,000 acre feet April through September and 43,000 acre feet April through July. These flows will be about 95 percent average. Normal water supplies are expected.

South Fork of the John Day will produce average water supplies.

Middle Fork John Day at Ritter is forecast to discharge about 118,000 acre feet April through September or 97 percent average.

North Fork John Day near Dale is forecast at 240,000 acre feet or 97 percent of the average.

Excellent soil moisture conditions may delay the usual cutoff dates on Beech, Fox and Long Creeks.

Harwood, Riley and Indian Creeks should produce about average water supplies.

Butter, Thirtymile and Rock Creeks should hold up well until about their usual dates of drop off.

Central Oregon

Snow-cover in the Crooked River Basin has increased from 31 percent average on March 1 to 78 percent on April 1. The increase in snow on the Deschutes has not been so great rising from 60 to 81 percent. Soil Moisture in all Central Oregon watersheds is excellent and will greatly favor the runoff yet to come.

Flow of Crooked River near Post is forecast at 80,000 acre feet or 64 percent average for the April-September period. In spite of excellent soil moisture conditions the flow of this stream will drop off at a rather early date.

Flow into Ochoco Reservoir is forecast at 17,000 acre feet or 61 percent of the usual April-September amount. All lands served from the reservoir will have good supplies and present conditions point to a fair year for areas above the reservoir. The reservoir is now spilling.

Crescent Creek at Crescent Lake can expect a flow of 21,000 acre feet or 99 percent average April through September. The Crescent Lake Reservoir is full and will furnish adequate water for the needs of the Tumalo Project.

Little Deschutes River is forecast at 73,000 acre feet or 81 percent of the usual April-September flow. The first four months, April through July, will bring 65,000 of this total figure. Walker Basin lands should receive about normal amounts from this source.

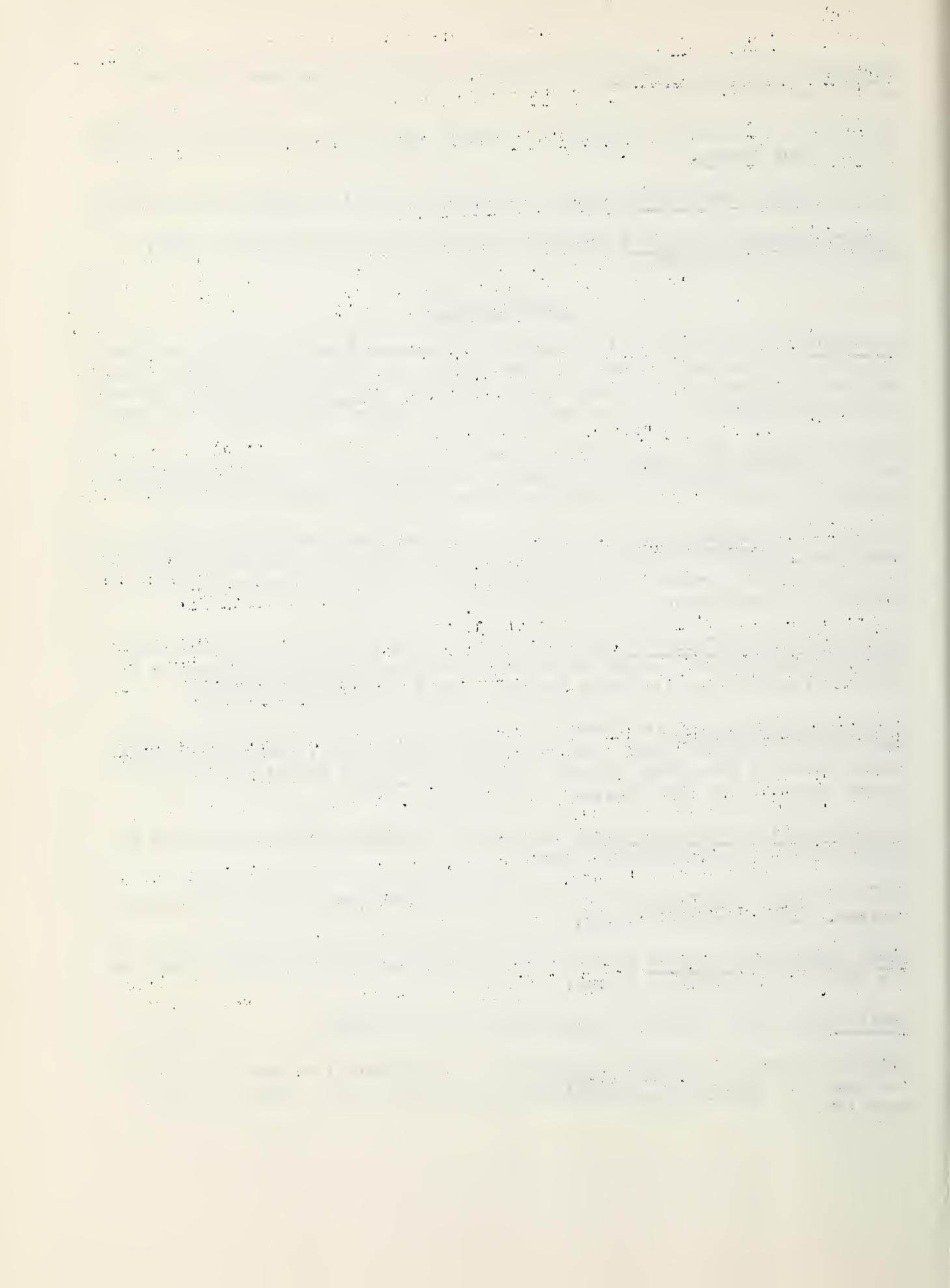
Deschutes River below Snow Creek is forecast to flow 55,000 acre feet or 91 percent of the April-September normal.

Inflow to Crane Prairie Reservoir is set at 108,000 acre feet or 90 percent average. The reservoir is full.

Odell Creek near Crescent should produce 30,000 acre feet for 103 percent of the usual April-September figure.

Davis Lake should remain at a high level again this year.

Available storage in Wickiup Reservoir is 200,000 acre feet and it is filled to capacity. North Unit Irrigation District is assured of adequate water supplies.



Total flow of the Main Deschutes River at Benham Falls is forecast at 485,000 acre feet or 95 percent of the usual April-September discharge. The first four months will bring 330,000 acre feet.

An adequate water supply is in sight for the Swalley, Arnold, and Lone Pine systems.

Discharge of Tumalo Creek and Columbia Southern Canal is forecast at 42,000 acre feet for 87 percent of the usual discharge. This will provide an adequate supply.

Squaw Creek is expected to flow 45,000 acre feet April-September or 91 percent of the average. Usual shortages can be expected on the Plainview-McAllister system this year. The old rights on the Squaw Creek Irrigation District should have adequate water.

Harney-Malheur Lake Basin

Snow-cover in the north end of the county is 97 percent average and 128 percent average in the south end. Low snow is conspicuously absent. Soil Moisture is excellent. Reports indicate the soil is the wettest in more than 20 years.

Silver Creek, west of Burns, is already flowing heavily but will probably drop off somewhat earlier than usual creating some unexpected late season shortages. Chickahominy Reservoir is full again this year.

Flow of Silvies River is forecast at 80,000 acre feet or 78 percent of the April-September average. Cutoffs will come a little earlier than usual on this stream.

The smaller creeks, Rattlesnake, Soldier, Coffee Pot and Cow, have made most of their flows already. Low elevation snow is gone in these areas too.

Donner and Blitzen River will produce 75,000 acre feet or 113 percent of the April-September average flow. Flows will be adequate from this source as well as from Bridge Creek, and other tributaries.

Callow Valley should have good water supplies this year.

Trout Creek near Denio is forecast at 10,000 acre feet April through September or 104 percent average. This stream and Wildhorse Creek should furnish near normal water supplies.

Southcentral Oregon

Snow-cover is generally greatly increased over the March 1 surveys but is noticeably missing at lower elevations. Soil Moisture is the heaviest in over twenty years.

In Goose Lake Basin snow-cover is only 41 percent average but reservoirs are full and spilling. Inflow to Drews Reservoir is forecast at only 24,000 acre feet or 79 percent of the April-July average. Cottonwood Reservoir is full.

as is Drews and these two sources of stored water will provide adequate supplies for all lands they serve.

Thomas Creek has already had a heavy flow as have all the other small tributaries. Where these streams head in low or moderate elevations the streamflow will fall off earlier than usual with resultant shortages. East-side tributaries such as Crane Creek and New Pine Creek and others should hold on somewhat longer because they head in the high Warner Mountains.

Warner Lake Basin has a snow-cover about 59 percent average and streamflow will fall to about 62 to 74 percent average with resultant shortages.

Twenty-mile Creek is forecast to flow 13,000 acre feet or 62 percent of the April-June average.

Deep Creek should produce 50,000 acre feet April through June or 74 percent average.

Honey Creek near Plush is forecast to discharge 11,000 acre feet in the next three months. This flow will be 71 percent of the usual April-June flow.

Guano Lake Basin is short on snow-cover and has been all winter, however, soils and stock ponds are well wetted as of now. Good late May or early June rains will be needed to keep the situation normal.

Chewaucan Basin has a snow-cover only 76 percent average but is also blessed with wet soils.

Flow of the Chewaucan River is forecast at 59,000 acre feet or 81 percent of the April-June average. Here again, the June rains will be needed for satisfactory water in the latter part of the season.

Abert Lake appears to be higher than at this time last year--the top of the graduated gage is submerged.

Summer Lake Basin will have adequate water.

Silver Lake Basin has already lost much of the snow at low and moderate elevations. Silver and Buck Creeks made heavy flows during the late February chinook. Late season water will be shorter than usual.

In Fort Rock Valley irrigation is by pumping. The water table is reported to be higher than for many years and should be adequate.

Klamath Basin

Snow-cover is about 76 percent average except for the Sprague River area which is 58 percent average and the Gerber area which is about 28 percent average. Low snow has been gone since late February. Soil Moisture is excellent at all elevations. Ground water flow is exceptionally heavy.

Sprague River near Chiloquin is forecast at 285,000 acre feet or 113 percent of the April through September average.

Williamson River is forecast at 485,000 acre feet for the period April through September. This will be 122 percent average. The next four months will bring 410,000 of this amount. Forecasted flows into Upper Klamath Lake are set exceptionally high primarily because of unusually heavy ground-water contribution.

Net inflow to Upper Klamath Lake is forecast at 640,000 acre feet April through September. Of this amount, 515,000 will come in the next four months. These flows will be 122 percent of the average. Flow of Big Spring Creek at Lenz Ranch continues to be very high.

Snow-cover in Lost River Watershed is very short. Soils are all very wet. Snow and rains produced heavy March water runoff into local reservoirs.

Gerber Reservoir has 87,300 acre feet in storage which is near the capacity of 94,000. Inflow yet to come in the April-September period is forecast at 20,000 acre feet or 83 percent of the average.

Clear Lake Reservoir holds 396,000 acre feet and the capacity is 440,000. Inflow yet to come in the next 6 months is forecast at 42,000 acre feet or 85 percent of average.

These two reservoirs, together with Upper Klamath Lake, will furnish adequate water to local irrigation districts.

Willow Reservoir (Gift) holds a fine supply at this time as do all the other small reservoirs and stock ponds.

Rogue-Umpqua

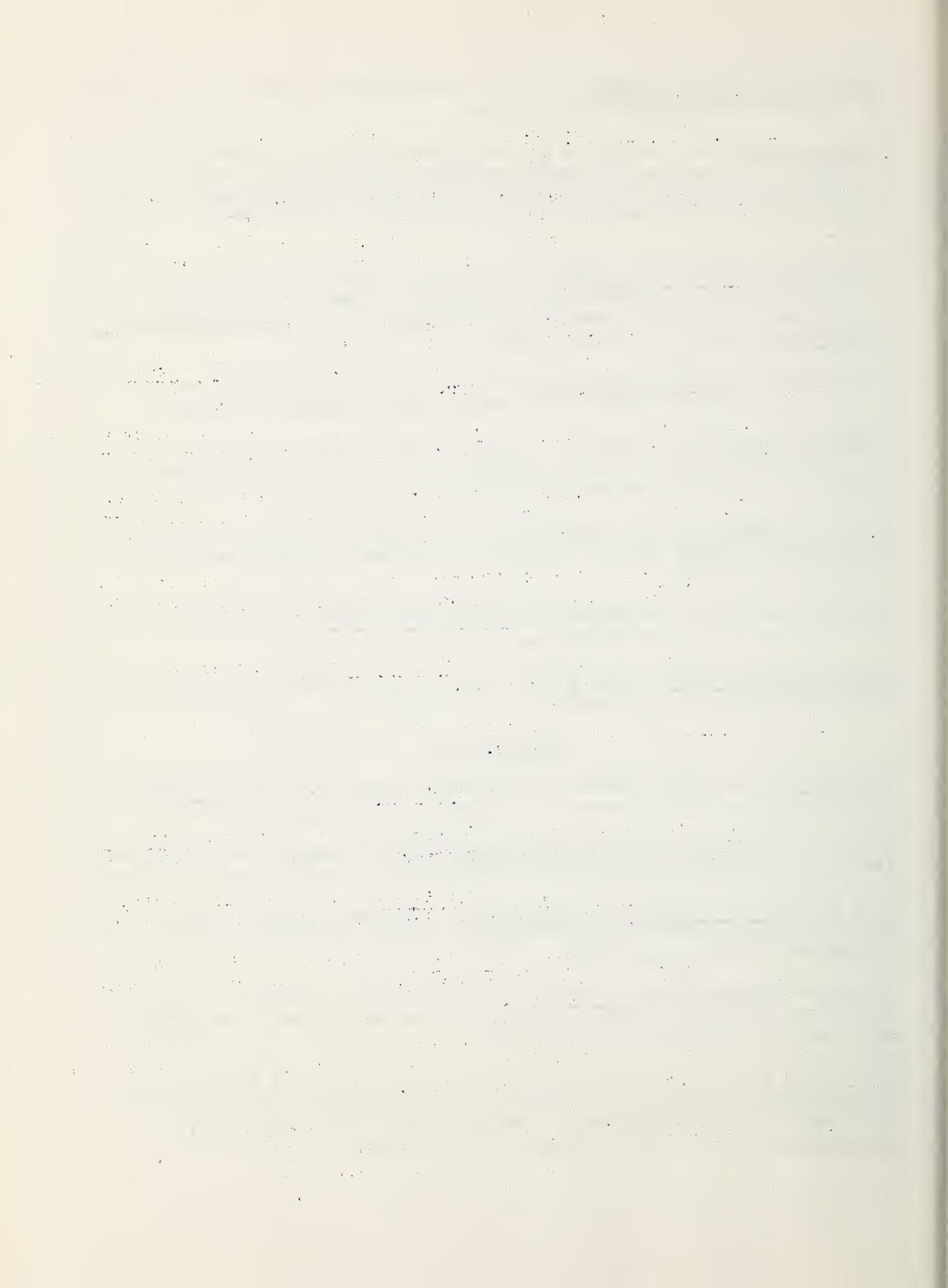
Snow-cover in the Umpqua Basin is 62 percent average and the Soil Moisture is reported to be excellent insuring a favorable base for snow-melt runoff.

Discharge of North Umpqua River below Lake Creek is forecast at 146,000 acre feet for the April-September period. This flow will be 89 percent average.

Flow of Clearwater River above Trap Creek is forecast at 55,000 acre feet or 86 percent of the April-September average. These flows will be adequate for hydro-electric power generation.

Discharge of Cow Creek near Azalea is estimated to be somewhat below average with flows falling off earlier than usual, thus creating some late season shortages for irrigation from this source.

Rogue Basin Snow-cover is 79 percent average but varies from 60 percent on the Illinois River through 83 percent on the Applegate and 84 percent on the Upper Rogue to about 70 percent on the Bear-Little Butte watersheds. Soil Moisture is excellent throughout the watershed.



Talent Irrigation District has good reservoired water supplies but can count on a greatly below average natural flow for the balance. Some late shortages seem certain.

Hyatt Reservoir is reported full but only 6 inches of snow are on the ground at that place. Inflow to this important reservoir will probably be considerably below average--lack of snow surveys prevents the making of the usual forecast. Emigrant Reservoir is full and spilling.

Fourmile Lake is full and can expect an inflow of about 7,000 acre feet in the next 6 months. Although this flow is 100 percent of the average it will not be obtained without satisfactory early summer rains.

Little Butte Creek, North Fork, below Fish Lake is forecast to discharge about 14,000 acre feet or 94 percent average. Fish Lake is already practically full but summer rains will be needed to replenish stored water as used.

South Fork of Little Butte is expected to have a much below average flow this year because of the short snow-cover.

Total water available to Medford and Rogue River Valley Irrigation Districts is only fair in amount with some late season shortages likely.

Big Butte Creek will probably provide near normal irrigation water supplies.

Big Putte Springs have been flowing greater than usual and Willow Creek reservoir on the City of Medford water system is full.

Rogue River above Prospect, known as North Fork, will discharge 280,000 acre feet or 88 percent of the April-September average. April-July period will bring 235,000 acre feet.

Middle Fork of the Rogue is forecast at 69,000 acre feet or 93 percent of the April-September average.

South Fork of the Rogue will discharge about 70,000 acre feet in the next six months. This will be 92 percent average.

Combining these tributaries the total flow of the Rogue River below South Fork is forecast to discharge 615,000 acre feet. This is 90 percent of the April-September average. The April-July period will bring 500,000 acre feet.

The Rogue River at Raygold is forecast to discharge 815,000 acre feet or 90 percent average during the April-September period. Of this amount, 685,000 will come in the first four months.

Rogue River at Grants Pass is forecast at 775,000 acre feet for April through September. This flow will be 91 percent average.

Minimum flow of Rogue River at Savage Rapids Dam is expected to drop very close to the 817 second-foot discharge which is the point at which canal alternation begins for the Grants Pass Irrigation District.

Flow of Evans Creek, Grove Creek, Jump-off Joe and other short streams heading in low watersheds, is expected to fall off sharply at a much earlier date than normal.

Flow of Applegate River near Copper is forecast at 100,000 acre feet April through September. This will be 86 percent average but is dependent upon usual good summer rains.

Flow of Little Applegate, Thompson and Williams Creeks will fall off sharply at an earlier date than usual. Smaller tributaries will have a very short flow this year.

The Illinois River at Kerby is forecast to flow 168,000 acre feet or 93 percent average in the April-September period.

Sucker Creek and East Fork Illinois River will have deficient flows about mid-August.

Flows of West Fork Illinois River, Deer Creek, and other tributaries will become critical in early August.

Throughout the Rogue Basin the "usual" summer rains will be very much needed to keep water supplies satisfactory. Higher than normal temperatures would definitely cause increased water shortages in many parts of this basin.

Southeastern Oregon

(This statement brings up-to-date the summation made at Vale, Oregon on March 7th.)

Snow-cover on the Owyhee between March 1st and April 1st increased in a great jump from 67 percent average to 107 percent average. This came mostly as rain at low and moderate elevations but as snow-stored water on the higher areas. Soil-Moisture is highest for many years.

The month of March brought an inflow of 185,000 acre feet to Owyhee Reservoir and brought total usable storage up to 696,600 acre feet by April 1st. The reservoir was being spilled to make room for water yet to come.

Forecast for Owyhee Inflow for the period April through September is now set at 400,000 acre feet or 87 percent average. The first four months should produce 385,000 of this figure.

Jordan Creek should produce somewhat below average flow this season with some early cutoffs. The reservoired water in Antelope will serve its acreage well this year.

Flows of McDermitt and Tenmile Creeks in Upper Quinn River watershed will fall off sharply at a somewhat earlier than normal date.

Malheur snow-cover has also increased somewhat from its March 1st condition to 92 percent average on April 1st. Soils also are very well wetted throughout the watersheds.

Discharge of Malheur River near Drewsey is forecast at 94,000 acre feet or 115 percent of the April-September average.

Warmsprings Reservoir is full with 193,000 acre feet behind its dam.

Flow of Malheur River, North Fork is forecast at 73,000 for 114 percent of the April-September average.

Agency Valley Reservoir has 58,700 acre feet in storage; which is practically full.

Willow Creek #3 (Malheur Lake) was reported to hold a satisfactory water supply.

All lands served from these large reservoirs have an adequate supply available for all lands usually served.

Bully Creek watershed is expected to cut off sharply at an earlier than normal date because all low elevation snow was flushed out during the chinook of late February.

Other small tributaries will definitely have a short flow season with consequent reduction in irrigation water supplies.

Willamette Valley

Snow-cover for the total watershed is 78 percent of average. Stream flow during the next six months will be less than average and will range from 85-100 percent average on the snow fed streams.

Row River near Dorena, a tributary of the Coast Fork, is forecast at 83,000 acre feet or 83 percent of average for April through September.

The Middle Fork Willamette near Oakridge should flow 765,000 acre feet or 96 percent average during April-September. Storage in Lookout Point Reservoir is now 215,400 acre feet. An additional 125,000 acre feet is being reserved for flood control.

McKenzie River near Vida is forecast to flow at 1,080,000 acre feet during April through September or 90 percent of average. The upstream station at McKenzie Bridge should flow 515,000 acre feet or 91 percent during the same period.

Snow-cover on the Santiam watershed is 76 percent average.

South Santiam at Waterloo will have a flow of 520,000 acre feet during April through September or 93 percent of average.

During this same six months period North Santiam at Mehama should flow 775,000 acre feet or 92 percent average. Detroit Reservoir now holds 217,300 acre feet of water. An additional 123,000 acre feet can be stored but is being reserved for flood control.

Willamette River at Salem should flow 4,300,000 acre feet during April through September or 99 percent of average. Over 90 percent of this flow will occur during the first four months or 3, 850,000 acre feet.

Snow-cover in the Clackamas basin increased from 54 percent of average last month to 67 percent of average this month.

Clackamas River near Cazadera should flow 680,000 acre feet during the next six months or 87 percent of the 1938-52 average. April through September forecasts at stations upriver from Cazadera are as follows:

Clackamas at Big Bottom, 140,000 a. f. -- 86 percent
Oak Grove Fork above Intake, 160,000 a. f. -- 86 percent
Clackamas above Three Lynx, 510,000 a. f. -- 85 percent

OREGON SNOW SURVEYS - ABOUT APRIL 1, 1957

DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	SNOW COVER MEASUREMENTS						Prev. Yrs.of Record	
			Date of Survey	Snow Depth (In.)	Water Content (In.)	1957				
						1956	1955	Avg.		

U P P E R C O L U M B I A D R A I N A G E
LOWER SNAKE IN OREGON

OWYHEE RIVER

Jack Peak	16H4	8420	3-27	91	31.5 ^a	No	Previous	Record		
*Fish Creek	18G2	7900	3-25	96	37.9	33.4 ^b	18.6	26.1**	17	
*Bear Creek	15H1	7800	3-29	69	23.3	23.1	17.2	21.9**	14	
*Granite Peak	17H4	7800	3-29	52	17.5	14.5	6.7	11.8**	16	
Upper Jack Creek	16H2	7250	3-27	43	14.0 ^a	6.4	9.1	11.4**	16	
*Midas	16H3	7200	Report	Delayed	0.0	--	--	2.1**	14	
*Upper Buckskin	17H1	7200	3-29	35	12.8	4.0	8.8	10.5	20	
*76 Creek	15H3	7100	3-28	36	11.2 ^a	11.9	9.9	--	8	
*Silvies	18G1	6900	3-25	37	14.0	14.6	11.1	14.6**	19	
*Fox Creek	15H2	6800	3-28	22	8.0	6.8	8.3	8.8	20	
Lower Jack Creek	16H1	6800	3-27	11	3.5 ^a	0.0	4.0	2.7	22	
Rodeo Flat	15H6	6800	3-26	23	8.7 ^a	6.1	6.7	10.9**	16	
Big Bend	15H4	6700	3-26	26	9.3 ^a	12.5	6.5	10.3	29	
Fry Canyon	15H7	6700	3-26	17	6.8 ^a	7.2	6.8	10.2**	16	
*Lower Buckskin	17H2	6700	3-29	19	8.4	8.4	6.7	8.7**	15	
*Martin Creek	17H3	6700	3-29	20	8.4	9.1	4.9	8.2**	15	
Gold Creek	15H5	6600	3-26	15	5.9 ^a	5.8	4.8	7.0**	17	
*Disaster Peak	18H1	6500	Report	Delayed	17.4	6.5	17.2**	8		
Silver City	16F3	6400	3-31	48	18.1	18.3	14.0	15.0**	12	
South Mtn. #2	16G1	6340	3-30	38	12.4	12.6	12.1	11.5**	16	
Taylor Canyon	15H9	6200	3-27	0	0.0 ^a	6.1	3.3	4.2**	16	
*Tremewan Ranch	15H8	5700	3-27	0	0.0 ^a	0.0	--	1.0**	15	
Cliffs	16G2	5200	Not Surveyed		No Previous Record					
Lowery Ranch	16G3	4800	Not Surveyed		No Previous Record					
Shumway Ranch	17F1	4400	3-29	0	0.0	No Previous Record				
Highway Camp	17G1	4300	Not Surveyed		No Previous Record					
Barren Valley	18F5	4100	Not Surveyed		No Previous Record					

MALHEUR RIVER

*Barney Creek	18E14	5950	3-22	25	7.3	8.8	6.7	9.4**	12	
Blue Mtn. Springs	18E16	5900	3-23	48	16.2	18.5	13.3	15.8	27	
Crane Prairie	18E19	5375	3-23	18	6.8	11.3	8.9	8.8	19	
Lake Creek	18E18	5120	3-23	30	11.2	12.2	9.2	10.1	19	
Rock Spring	18F1	5100	3-27	12	4.3	4.8	5.7	4.7	21	
Stinking Water	18F4	4800	4-1	0	0.0	T	0.3	1.2**	17	
Eldorado Pass	18E20	4600	3-29	0	0.0	0.0	1.6	--	2	
Bonita	17E3	4600	Report	Delayed	No Previous Record					
Shumway Ranch	17F1	4400	3-29	0	0.0	No Previous Record				
Clover Creek	17E2	4100	Report Delayed		No Previous Record					

*Not located directly on this drainage area.

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^aTelegraphic

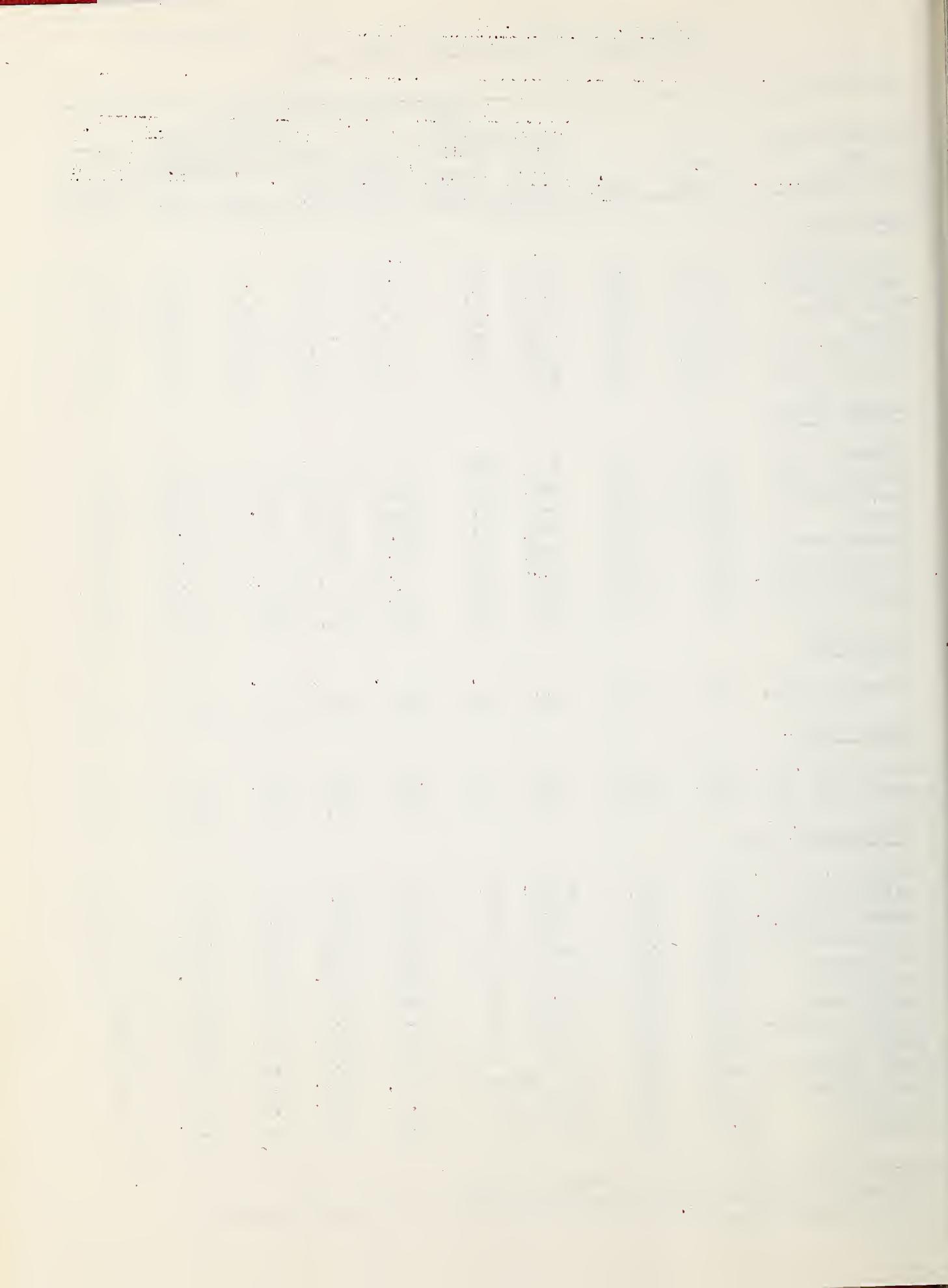
^bPartly estimated

OREGON SNOW SURVEYS - ABOUT APRIL 1, 1957

DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	Date of Survey	SNOW COVER MEASUREMENTS					Prev. 1938-52 Yrs.of Record
				1957		Past Record			
				Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1956	1955	Avg.
<u>BURNT RIVER</u>									
Barney Creek	18E14	5950	3-22	25	7.3	8.8	6.7	9.4**	12
Dooley Mountain	17E1	5430	3-21	23	6.6	9.1	7.8	9.1**	18
*Gold Center	18E8	5340	3-23	39	12.8	15.9	10.9	11.9**	18
Tipton	18E9	5100	3-22	28	9.6	11.9	10.8	9.7**	22
Blue Mtn. Summit	18E13	5098	3-25	24	7.6	10.1	8.2	7.8	22
Eldorado Pass	18E20	4600	3-29	0	0.0	0.0	1.6	--	2
<u>POWDER RIVER</u>									
Anthony Lake	18E1	7125	3-21	88	29.3	37.3	28.3	27.9	21
Goodrich Lake	18E6	6775	3-25	92	32.9	45.7	26.2	41.4**	9
Summit Springs	18D10	6000	3-21	67	20.9	28.4	19.1	21.1**	20
Bourne	18E5	5800	3-23	53	15.9	21.0	15.0	15.9	21
Taylor Green	17D7	5740	3-22	52	17.6	19.9	--	16.8	18
Dooley Mountain	17E1	5430	3-21	23	6.6	9.1	7.8	9.1**	18
Eilertson Mdws.	18E3	5400	3-24	27	9.5	13.7	11.4	11.9	19
*Gold Center	18E8	5340	3-23	39	12.8	15.9	10.9	11.9**	18
<u>PINE CREEK</u>									
Schneider Mdws.	17D8	5400	3-24	81	30.3	33.6	24.0	29.9	19
<u>IMNAHA RIVER</u>									
*Aneroid Lk. No.1	17D1	7480	3-25	95	32.5	57.0	27.4	37.2	22
*Aneroid Lk. No.2	17D2	7000	3-25	75	25.8	38.5	19.6	30.1**	15
<u>GRANDE RONDE RIVER</u>									
Aneroid Lk. No.1	17D1	7480	3-25	95	32.5	57.0	27.4	37.2	22
Anthony Lake	18E1	7125	3-21	88	29.3	37.3	28.3	27.9	21
Aneroid Lk. No.2	17D2	7000	3-25	75	25.8	38.5	19.6	30.1**	15
Summit Springs	18D10	6000	3-21	67	20.9	28.4	19.1	21.1**	20
Camp Carson	18B11	5970	3-20	31	10.4	14.0	11.6	8.8	17
Moss Spring	17D6	5850	3-22	79	26.6	29.1	24.7	25.1	19
Taylor Green	17D7	5740	3-22	52	17.6	19.9	--	16.8	18
Beaver Reservoir	18D9	5340	3-25	36	11.4	17.8	11.7	12.0**	18
Tollgate	18D3	5070	3-25	57	23.9	31.6	29.9	27.9	26
*Lucky Strike	18D6	5050	Not Surveyed		18.2	14.3	13.1**	18	
County Line	18D8	4800	3-25	17	5.9	9.5	11.8	--	5
Schoolmarm	18D7	4775	3-25	15	5.1	7.5	9.9	3.6**	10
Meacham	18D5	4300	3-25	20	7.7	13.2	19.0	8.7	28

*Not located directly on this drainage area.

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OREGON SNOW SURVEYS - ABOUT APRIL 1, 1957

DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	Date of Survey	SNOW COVER MEASUREMENTS				Prev. Yrs.of Record				
				1957	Snow Depth (In.)	Water Content: (In.)	Water Content (In.)					
<u>LOWER COLUMBIA DRAINAGE</u>												
<u>UMATILLA RIVER</u>												
Arbuckle Mtn.	19D2	5400	3-25	19	7.8	15.4	14.2	10.8				
Tollgate	18D3	5070	3-25	57	23.9	31.6	29.9	27.9				
Lucky Strike	18D6	5050	Not Surveyed			18.2	14.3	31.1**				
Meacham	18D5	4300	3-25	20	7.7	13.2	19.0	8.7				
Emigrant Spgs.	18D4	3925	3-25	11	4.0	7.0	13.3	5.8				
<u>WILLOW CREEK</u>												
Arbuckle Mtn.	19D2	5400	3-25	19	7.8	15.4	14.2	10.8				
<u>WALLA WALLA RIVER</u>												
Tollgate	18D3	5070	3-25	57	23.9	31.6	29.9	27.9				
<u>JOHN DAY RIVER</u>												
*Anthony Lake	18E1	7125	3-21	88	29.3	37.3	28.3	27.9				
Dixie Springs	18E11	6650	3-22	76	22.0	28.9	17.2	23.9				
*Snow Mountain	19F1	6300	3-26	41	14.5	13.8	11.6	15.1**				
Olive Lake	18E7	6000	3-25	66	21.8	28.4	19.2	19.9				
Blue Mtn. Spgs.	18E16	5900	3-23	48	16.2	18.5	13.3	15.8				
Arbuckle Mtn.	19D2	5400	3-25	19	7.8	15.4	14.2	10.8				
Gold Center	18E8	5340	3-23	39	12.8	15.9	10.9	11.9**				
*Izee Summit	19E9	5293	3-26	22	8.4	8.7	8.8	7.5				
Starr Ridge	19E7	5156	3-26	12	4.8	7.9	6.5	4.7				
Tipton	18E9	5100	3-22	28	9.6	11.9	10.8	9.7**				
Blue Mtn. Summit	18E13	5098	3-25	24	7.6	10.1	8.2	7.8				
*Lucky Strike	18D6	5050	Not Surveyed			18.2	14.3	13.1**				
Beech Ck. Summit	19E2	4800	3-26	9	4.2	6.4	6.6	4.7				
Schoolmarm	18D7	4775	3-25	15	5.1	7.5	9.9	3.6**				
<u>CROOKED RIVER</u>												
*Snow Mountain	19F1	6300	3-26	41	14.5	13.8	11.6	15.1**				
Derr	19E3	5670	3-26	24	8.1	11.3	9.1	10.3				
Ochoco Meadows	20E2	5200	3-29	22	8.2	11.0	8.5	11.3				
Marks Creek	20E1	4540	3-27	1.5	0.5	2.1	2.8	3.3				

*Not located directly on this drainage area.

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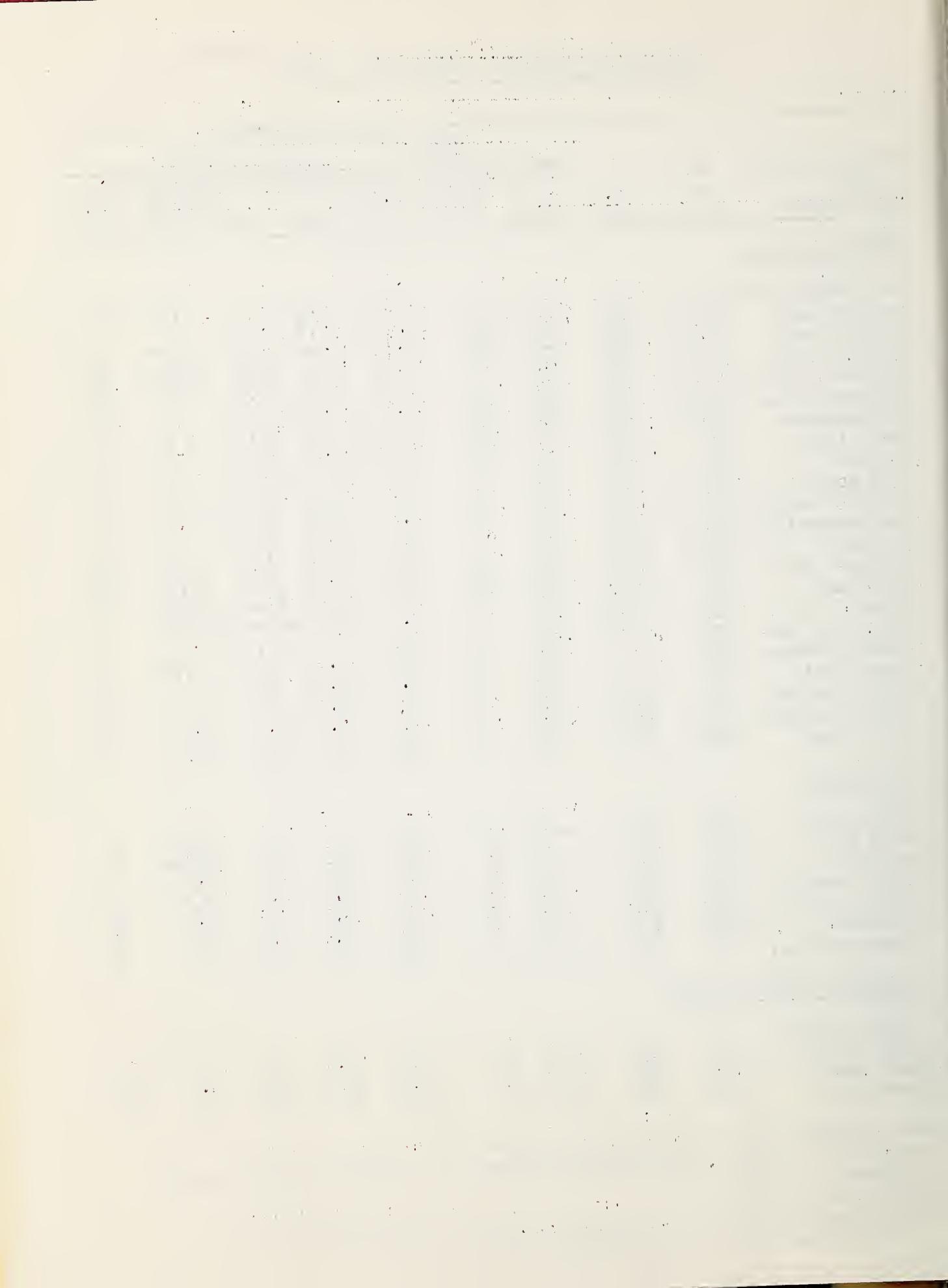
OREGON SNOW SURVEYS - ABOUT APRIL 1, 1957

DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	Date of Survey	SNOW COVER MEASUREMENTS			Past Record		
				1957	Snow Depth (In.)	Water Content: (In.)	Water Content (In.)	1938-52	Prev. Yrs. of Record
<u>DESCHUTES RIVER</u>									
New Dutchman Flat	21F2	6400	3-26	111	45.1	72.4 ^b	43.7	53.1**	20
Paulina Lake	21F13	6330	3-27	57	21.5	28.6	14.1	- -	2
Windigo Pass	22F15	5800	3-28	104	40.8	68.6	37.7	55.3**	9
Charlton Lake	21F7	5750	3-21	75	24.1	46.2	31.4	27.8**	16
Three Ck. Mdws.	21E13	5600	3-25	30	11.9	30.1	19.6	20.9	28
Willamette Pass	22F14	5600	3-29	96	37.0	63.2	38.4	- -	10
Irish-Taylor	21F6	5500	3-22	108	35.5	58.4	37.9	- -	7
*Waldo Lake	22F2	5500	3-21	83	26.6	50.1	30.9	29.3**	18
Tangent	21F3	5400	3-26	36	14.1	34.3	16.6	- -	5
Fire Road	21F14	5050	3-27	9	4.0	13.2	6.2	- -	2
Cascade Summit	22F3	4880	3-27	69	29.2	49.5	32.1	32.2	27
New Crescent Lk.	21F10	4800	3-27	29	12.1	26.8	15.0	- -	5
*Chemult	21F11	4760	3-31	8	2.9	17.0	4.9	9.6**	19
Crescent Lake	21F9	4760	3-27	15	6.7	22.8	13.2	10.0	22
Hogg Pass	21E6	4755	3-27	90	38.1	73.5	49.6	43.8**	18
Mowich	21F17	4700 ^f	3-27	0	0.0	No previous record			
Black Pine Spg.	21E11	4600	3-25	6	2.7	- -	7.2	- -	4
Caldwell Ranch	21F8	4400	3-22	19	6.0	17.1	7.9	8.4**	19
Hungry Flat	21F4	4400	3-26	0	0.0	11.5	5.6	- -	4
*Brooks Meadows	21D6	4300	3-28	26	9.9	18.4	17.0	12.9	24
Paulina Prairie	21F15	4285	3-27	0	0.0	1.1	T	- -	2
Clear Lake	21D12	3500	3-25	29	11.0	24.7	17.5	14.2	25
<u>HOOD RIVER</u>									
Tilly Jane	21D7	6000	3-24	101	38.9	- -	- -	55.0**	7
Phlox Point	21D8	5600	3-21	115	44.8	93.6	71.6	61.5**	19
Red Hill	21D4	4400	3-24	94	41.7	74.4	57.2	66.3**	9
Brooks Meadows	21D6	4300	3-28	26	9.9	18.4	17.0	12.9	24
Still Creek	21D9	3700	3-21	55	18.9	46.6	34.8	24.0	20
Clear Lake	21D12	3500	3-25	29	11.0	24.7	17.5	14.2	25
Greenpoint Res.	21D1	3400	3-21	56	20.8	38.9	21.3	- -	6
<u>WILLAMETTE VALLEY STREAMS</u>									
SANDY RIVER ¹									
Phlox Point	21D8	5600	3-21	115	44.8	93.6	71.6	61.5**	19
Still Creek	21D9	3700	3-21	55	18.9	46.6	34.8	24.0	20
*Clear Lake	21D12	3500	3-25	29	11.0	24.7	17.5	14.2	25

*Not located directly on this drainage area.

**Average is for less than 15 years of record in the 1938-52 period but not less than 5 years.

^bPartly estimated.¹Not strictly a part of the Willamette Drainage; these surveys are indicative of west slope conditions.



OREGON SNOW SURVEYS - ABOUT APRIL 1, 1957

DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	Date of Survey	SNOW COVER MEASUREMENTS				Past Record	
				1957	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1938-52	Yrs. of Record
<u>WILLAMETTE VALLEY STREAMS (Cont'd)</u>									

CLACKAMAS RIVER

*Clear Lake	21D12	3500	3-25	29	11.0	24.7	17.5	14.2	25
Peavine Ridge	21D14	3500	4-1	35	14.0 ^a	34.1	26.1	19.8	20
Clackamas Lake	21D13	3400	3-28	22	8.3	24.4	18.7	15.7**	16
Timothy Lake	21D18	3295	4-1	29	11.6 ^a	28.1	--	--	1
Big Bottom	21D15	2118	4-2	0	0.0	18.3	12.0	--	6
Lake Harriet	21D16	2045	4-1	0	0.0	T	0.0	--	6

SANTIAM RIVERS

Hogg Pass	21E6	4755	3-27	90	38.1	73.5	49.6	43.8**	18
Santiam Junction	21E5	3990	3-27	35	14.5	45.7	34.5	25.3**	16
Marion Forks	21E4	2730	3-27	21	10.0	28.5	20.3	13.6**	16
Whitewater Brdg.	21E3	2175	3-27	0	0.0	11.3	7.7	--	7
Detroit (new town)	22E1	1500 ¹	3-27	0	0.0	T	0.0	--	6
Detroit Dam	22E2	1580	3-27	0	0.0	0.0	0.0	--	6
Mill City	22E3	826	3-27	0	0.0	0.0	0.0	--	6

Snow Line: Approximately 2300¹

MCKENZIE RIVER

McKenzie	21E7	4800	3-28	93	38.9	70.5	54.2	41.7**	16
Hogg Pass	21E6	4755	3-27	90	38.1	73.5	49.6	43.8**	18
Santiam Junction	21E5	3990	3-27	35	14.5	45.7	34.5	25.3**	16
Dead Horse Grade	21E8	3800	3-28	32	12.0	37.3	30.8	--	7
White Br. Slide	21E9	2800	3-28	0	0.0	14.2	16.4	--	7
Lost Ck. Ranch	22E4	1956	3-28	0	0.0	6.0	4.0	--	5
McKenzie Bridge	22E5	1372	3-28	0	0.0	0.0	0.0	--	6
Vida	22E6	800	3-28	0	0.0	0.0	0.0	--	6

Snow Line: Approximately 2800¹

MIDDLE FORK WILLAMETTE RIVER

*Charlton Lake	21F7	5750	3-21	75	24.1	46.2	31.4	27.8**	16
Willamette Pass	22F14	5600	3-29	96	37.0	63.2	38.4	--	10
Waldo Lake	22F2	5500	3-21	83	26.6	50.1	30.9	29.3**	18
Cascade Summit	22F3	4880	3-27	69	29.2	49.5	32.1	32.2	27
Champion	22F9	4500	4-1	43	16.9	43.8	38.6	28.3**	18
Salt Ck. Falls	22F4	4000	3-27	28	9.2	29.8	23.6	--	7
Railroad Overps.	22F5	2750	3-27	0	0.0	9.0	5.0	--	7
McCredie Spring	22F6	2120	3-27	0	0.0	0.0	0.0	--	7
Oakridge	22F7	1310	3-27	0	0.0	0.0	0.0	--	7
Meridian Dam	22F8	750	3-27	0	0.0	0.0	0.0	--	7

Snow Line: Approximately 3700¹

*Not located directly on this drainage area. a Telegraphic.

**Average is for less than 15 yrs. of record in the 1938-52 period but not less than 5 years.

OREGON SNOW SURVEYS - ABOUT APRIL 1, 1957

DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	Date of Survey	SNOW COVER MEASUREMENTS			Past Record		
				1957	Snow Depth (in.)	Water Content (in.)	1938-52 Prev.	1955 Yrs. of Avg.	Record

WILLAMETTE VALLEY STREAMS (Cont'd.)

COAST FORK WILLAMETTE RIVER (Row River)

Champion	22F9	4500	4-1	43	16.9	43.8	38.6	28.3**	18
Colden Curry Ck.	22F10	3136	4-1	0	0.0	10.4	7.5	- -	7
Weaver Creek	22F11	2730	4-1	0	0.0	8.0	0.0	- -	6
Lund Park	22F12	1740	4-1	0	0.0	0.0	0.0	- -	7
Laying Creek R.S.	22F13	1200	4-1	0	0.0	0.0	0.0	- -	7

Snow Line: Approximately 3700'

MARY'S PEAK

Mary's Peak	23E1	3620	Not Surveyed	- -	22.2	11.6**	15
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OREGON AND CALIFORNIA COAST DRAINAGE

UMPQUA RIVER

Windigo Pass	22F15	5800	3-28	104	40.8	68.6	37.7	55.3**	9
Diamond Lake	22F18	5315	3-31	46	18.8	34.7	23.2	23.0	28
Whaleback	22G1	5140	Report Delayed			52.5	32.3	35.1**	19
Champion	22F9	4500	4-1	43	16.9	43.8	38.6	28.3**	18
N.Umpqua	22F16	4215	3-26	17	5.3	23.3	15.8	13.2**	19
Trap Creek	22F17	3800	3-26	0	0.0	19.7	15.5 ^c	11.4**	15
Goolaway Mtn.	23G2	3780	Report Delayed			24.5	6.5	3.7**	13
Goolaway Gap	23G1	3050	Report Delayed			8.5	0.0	1.1**	14

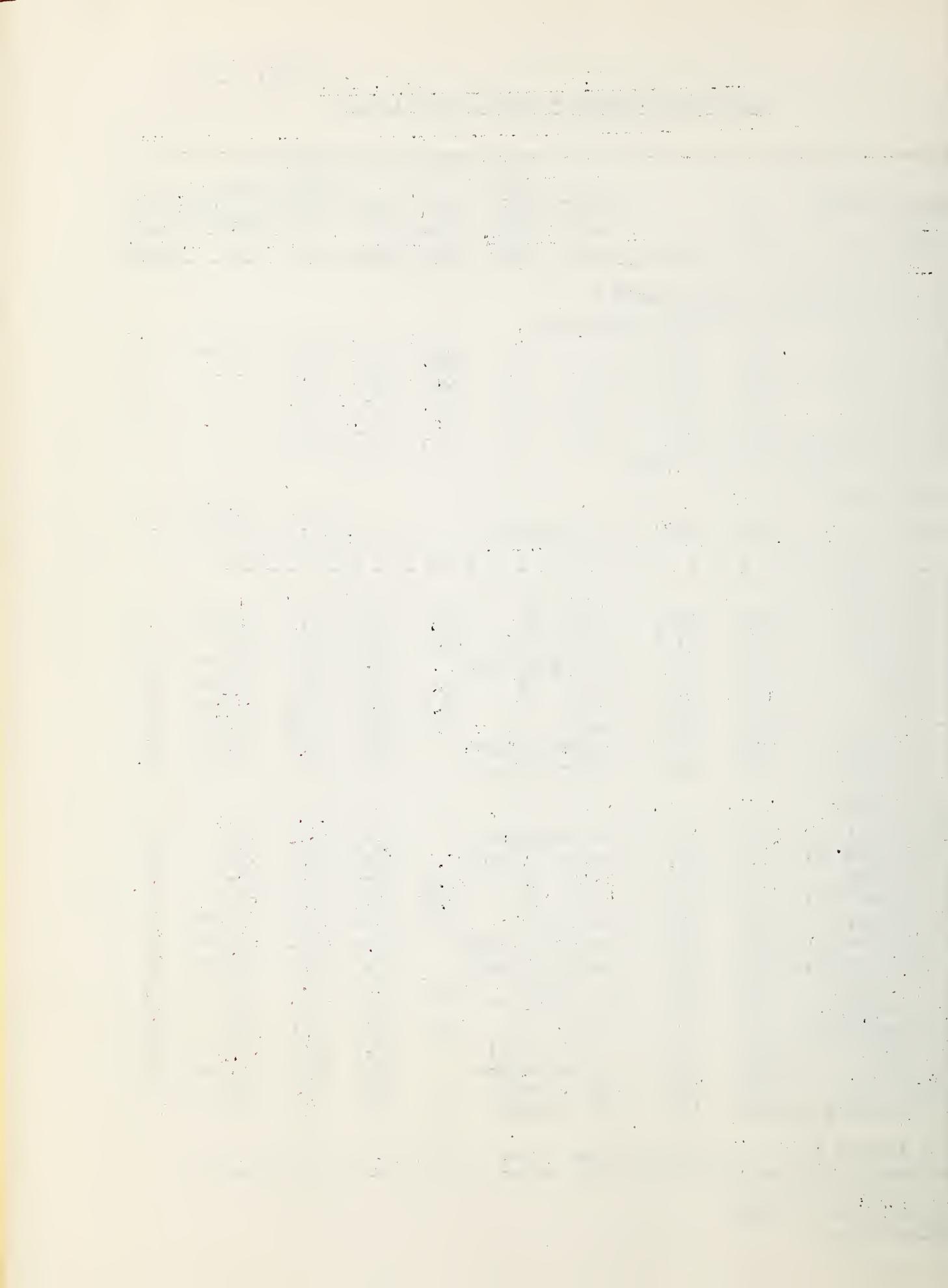
ROGUE RIVER

Wagner Butte	22G18	6900	Not Surveyed		23.9	12.3	16.9	22
Seven Lakes No.1	22G10	6800	Report Delayed		70.4	53.0	51.2	20
Big Red Mtn.	22G21	6500	3-30	54	23.5	50.9	21.4	28.6
Little Red Mtn.	22G22	6500	3-31	48	20.9	39.6	15.9	22.3
*Park Hdqrs.	22G5	6450	4-1	142	57.1 ^a	78.4	41.0	64.8**
Scragg Mountain	22H1	6200	Report Delayed		- -	19.1	29.3**	14
Seven Lakes No.2	22G11	6200	Report Delayed		59.1	40.9	40.8**	20
*Annie Spring	22G6	6018	4-1	104	42.3 ^a	62.9	32.3	47.4
*Fourmile Lake	22G12	6000	Not Surveyed		41.0	25.2	- -	5
Grayback Peak	23G3	6000	3-24	51	19.2	56.3	25.7	25.4
Billie Cr.Divide	22G13	5300	Not Surveyed		39.1	23.9	23.4	26
Whaleback	22G1	5140	Report Delayed		52.5	32.3	35.1**	19
Hobart Lake	22G17	5010	Not Surveyed		8.1	0.5	6.3**	9
*Hyatt Prairie Res.	22G16	4900	Not Surveyed		15.0	3.6	9.0	24

*Not located directly on this drainage area.

**Average is for less than 15 years of record in the 1938-52 period but not less than 5 years.

^aBased on two samples.^bTelegraphic.



OREGON SNOW SURVEYS - ABOUT APRIL 1, 1957

DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	Date of Survey	SNOW COVER MEASUREMENTS			Past Record		
				1957	Snow Depth (In.)	Water Content (In.)	Water Content (In.) 1938-52	Prev. Yrs. of Record	
<u>ROGUE RIVER - (Cont'd.)</u>									
Fish Lake	22G14	4865	Not Surveyed		23.2	12.3	11.7**	23	
Siskiyou Summit	22G20	4630	4-1 0	0.0	8.9	--	4.0	19	
Althouse	23G4	4400	4-4 0	0.0	17.7	2.9	6.8	20	
Page Mountain	23G5	4045	4-4 0	0.0	19.6	--	--	1	
Oregon Caves	23G6	4000	Not Surveyed		--	0.0	--	1	
Goolaway Mth.	23G2	3780	Report Delayed		24.5	6.5	3.7**	13	
Silver Burn	22G2	3720	3-30 12	4.9	19.8	12.4	11.1	20	
So. Fork Canal	22G9	3500	4-1 0	0.0	0.6	0.0	1.6	20	
Goolaway Gap	23G1	3050	Report Delayed		8.5	0.0	1.1**	14	
Hazel View	23H1	2500	4-4 0	0.0	0.0	--	--	1	
<u>KLAMATH LAKE BASIN</u>									
Summer Rim	20G2	7200	3-31 51	17.5 ^a	28.0	10.1	17.9**	20	
Seven Lakes No.1	23G10	6800	Report Delayed		70.4	53.0	51.2	20	
Park Hdqrs.	22G5	6450	4-1 142	57.1 ^a	78.4	41.0	64.8**	13	
Seven Lakes No.2	22G11	6200	Report Delayed		59.1	40.9	40.8**	20	
Annie Spring	22G6	6018	4-1 104	42.3 ^a	62.9	32.3	47.4	24	
Fourmile Lake	22G12	6000	Not Surveyed		41.0	25.2	--	5	
Strawberry	20G9	5600	3-29 11	4.7	11.3	3.5	6.7	16	
*Quartz Mtn(COPCO)	9	5504	3-29 0	0.0	8.0	5.0	5.1**	24	
Sun Mountain	21G2	5350	3-28 60	23.7	40.9	17.3	28.3	20	
*Quartz Mountain	20G6	5320	3-29 0	0.0	8.9	4.4	4.7	26	
Billie Ck. Divide	20G13	5300	Not Surveyed		39.1	23.9	23.4**	26	
Crowder Flat	20H2	5200	Not Surveyed		--	--	0.1**	13	
Taylor Butte	21G3	5100	3-29 0	0.0	10.3	0.8	3.9	19	
Bly Mountain	21G5	5090	4-1 0	0.0	No Previous Record				
Lake of the Woods	22G15	4960	Report Delayed		23.8	9.4	9.9	20	
Hyatt Prairie Res	22G16	4900	Not Surveyed		15.0	3.6	9.0	24	
Gerber	21G4	4850	4-1 0	0.0	--	--	--	3	
Bly 101 Ranch(COPCO)	10	4800	4-1 T	T	0.0	0.0	0.1**	28	
Chemult	21F11	4760	3-31 8	2.9	17.0	4.9	9.6**	19	
Yamsey (COPCO)	12	4600	Report Delayed		1.5	1.8	0.7	26	
Kirk (COPCO)	6	4533	Report Delayed		4.8	T	1.3	25	
Beatty (COPCO)	1	4300	4-1 0	0.0	0.0	0.0	0.0**	29	
Crystal (COPCO)	4	4200	4-1 4	1.5	12.5	5.0	5.6	27	
Harriman Lodge(COPCO)	8	4200	Report Delayed		T	0.0	1.4**	27	
Chiloquin (COPCO)	3	4187	Report Delayed		0.0	0.0	0.1	29	
Fort Klamath (COPCO)	5	4150	4-1 1	T	T	0.0	1.3	30	

*Not located directly on this drainage area.

**Average is for less than 15 years of record in the 1938-52 period but not less than 5 years.

(COPCO) - Water content determined by melting a measured sample (The California Oregon Power Co.'s Station).

^aTelegraphic.

OREGON SNOW SURVEYS - ABOUT APRIL 1, 1957

DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	Date of Survey	SNOW COVER MEASUREMENTS			Past Record		
				1957	Snow Depth (In.)	Water Content (In.)	1938-52 Prev.	1955	Avg.

I N T E R I O R D R A I N A G E

GOOSE LAKE BASIN

Cox Flat	20G11	5750	Not Surveyed			No Previous Record			
State Line	20H1	5750	Not Surveyed			No Previous Record			
Camas Creek	20G8	5720	3-28	15	6.4	17.2	8.6	10.9**	18
Strawberry	20G9	5600	3-29	11	4.7	11.3	3.5	6.7**	16
Quartz Mtn. (COPCO)	9	5504	3-29	0	0.0	8.0	5.0	5.1**	24
Quartz Mtn.	20G6	5320	3-29	0	0.0	8.9	4.4	4.7	26
Crowder Flat	20H2	5200	Not Surveyed			--	--	0.1	13

WARNER LAKE BASIN

Sherman Valley	20G10	6600	Not Surveyed			No Previous Record			
*Camas Creek	20G8	5720	3-28	15	6.4	17.2	8.6	10.9**	18

GUANO LAKE BASIN

Bald Mountain	19H1	6720	4-1	5	1.2	2.8	4.0	3.4**	17
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CHEWAUCAN RIVER

*Summer Rim	20G2	7200	3-31	51	17.5 ^a	28.0	10.1	17.9**	20
Sherman Valley	20G10	6600	Not Surveyed			No Previous Record			
Mill Creek	20G4	6200	3-31	15	5.0 ^a	21.8	4.1	6.9**	18
Cox Flat	20G11	5750	Not Surveyed			No Previous Record			
*Quartz Mountain	20G6	5320	3-29	0	0.0	8.9	4.4	4.7	26

SILVER LAKE BASIN

Silver Creek	21F12	4900	3-29	0	0.0	3.9	0.0	1.0**	16
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HARNEY BASIN

Fish Creek	18G2	7900	3-25	96	37.9	33.4	18.6	26.1**	17
Silvies	18G1	6900	3-25	37	14.0	14.6	11.1	14.6**	19
Snow Mountain	19F1	6300	3-26	41	14.5	13.8	11.6	15.1**	13
Blue Mtn. Spgs.	18E16	5900	3-23	48	16.2	18.5	13.3	15.8	27
Delintment Lake	19F2	5600 ^b	3-27	21	7.7	8.8 ^b	6.4	--	7

*Not located directly on this drainage area.

**Average is for less than 15 years of record in the 1938-52 period but not less than 5 years.

^aPartly estimated. ^bTelegraphic

(COPCO) - Water content determined by melting a measured sample (The California Oregon Power Co.'s Station).

OREGON SNOW SURVEYS - ABOUT APRIL 1, 1957

DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	SNOW COVER MEASUREMENTS							
			Date of Survey	Snow Depth (In.)	Water Content (In.)	Past Record			Prev. 1938-52 Yrs. of Record	
						1957	1956	1955		
<u>HARNEY BASIN (Cont'd.)</u>										
Izee Summit	19E9	5293	3-26	22	8.4	8.7	8.8	7.5	21	
Idlewild Camp	18F3	5200	3-27	7	2.4	5.3	4.8	4.6	26	
Starr Ridge	19E7	5156	3-26	12	4.8	7.9	6.5	4.7	21	
Lake Creek	18E18	5120	3-23	30	11.2	12.2	9.2	10.1	19	
Rock Spring	18F1	5100	3-27	12	4.3	4.8	5.7	4.7	21	
Emigrant Butte	19F3	5000	3-27	2	0.8	No previous Record				
Stinking Water	18F4	4800	4-1	0	0.0	T	0.3	1.2**	17	
<u>ALVORD LAKE BASIN</u>										
*Disaster Peak	18H1	6500	3-31	22	9.6	17.4	6.5	17.2**	8	
<u>McDERMITT CREEK</u>										
Disaster Peak	18H1	6500	3-31	22	9.6	17.4	6.5	17.2**	8	

*Not located directly on this drainage area.

**Average is for less than 15 years of record in the 1938-52 period but not less than 5 years.

OREGON SNOW SURVEYS - DELAYED DATA

DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	Date of Survey	SNOW COVER MEASUREMENTS				Past Record	
				1957	Snow Depth (In.)	Water Content (In.)	Water Content (In.)	1938-52	Prev. Yrs. of Record

M A R C H 1, 1957

UMPQUA RIVER

North Umpqua	22F16	4215	3-8	10	3.4	22.5	13.4	--	5
Trap Creek	22F17	3800	3-8	0	0.0	21.0	15.1	--	3

ROGUE RIVER

Scragg Mtn.	22H1	6200	3-10	32	14.7	--	16.3	25.4**	12
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KLAMATH LAKE BASIN

Lake of the Woods	22G15	4960	2-28	10	4.0	21.5	11.8	9.1	20
Kirk (COPCO)	6	4533	2-28	4	2.4	12.1	6.5	5.9	29
Crystal (COPCO)	4	4200	2-28	9	4.0	14.8	11.2	8.7	27
Harriman Lodge (COPCO)	8	4200	2-28	0	0.0	9.2	4.8	4.0	29

M A R C H 15, 1957

DESCHUTES RIVER

New Dutchman Flat	21E2	6400	3-12	112	39.3	No previous record			
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WILLAMETTE VALLEY STREAMSSANTIAM RIVERS

Hogg Pass	21E6	4755	3-15	100	34.0	69.9	42.3 ^b	--	3
Santiam Junction	21E5	3990	3-15	43	14.5	47.4	27.7	--	3
Marion Forks	21E4	2730	3-15	26	11.3	28.1	18.3	--	3
Whitewater Bridge	21E3	2175	3-15	T	T	14.0	8.7	--	3
Detroit (new town)	22E1	1500	3-15	0	0.0	9.3	T	--	3
Detroit Dam	22E2	1580	3-15	0	0.0	7.3	T	--	3
Mill City	22E3	826	3-15	0	0.0	0.0	0.0	--	2

Snow Line: Approximately 2200'

MIDDLE FORK WILLAMETTE RIVER

Cascade Summit	22F3	4880	3-15	80	25.0	49.8	28.5	--	3
Salt Creek Falls	22F4	4000	3-15	29	8.0	29.4	20.4	--	3
Railroad Overpass	22F5	2750	3-15	0	0.0	11.6	7.2	--	3
McCredie Spring	22F6	2120	3-15	0	0.0	2.6	0.0	--	3
Oakridge	22F7	1310	3-15	0	0.0	0.0	0.0	--	3
Meridian Dam	22F8	750	3-15	0	0.0	0.0	0.0	--	3

Snow Line: Approximately 3600'

^bPartly estimated.

** Average is for less than 15 years of record in the 1938-52 period but not less than 5 years.

OREGON SNOW SURVEYS - DELAYED DATA

DRAINAGE BASIN and SNOW COURSE	No. or State	Elev.	Date of Survey	SNOW COVER MEASUREMENTS			Prev. 1938-52 Yrs.of Record
				1957	Snow Water Depth (In.)	Water Content (In.)	

M A R C H 15, 1957 (C O N T ' D.)

COAST FORK WILLAMETTE RIVER (Row River)

Champion	22F9	4500	3-14	52	12.8	42.6	37.4 ^b	--	3
Golden Curry Creek	22F10	3136	3-14	11	1.1	20.2	10.0	--	3
Weaver Creek	22F11	2440	3-14	T	T	10.2	5.4	--	2
Lund Park	22F12	1700	3-14	0	0.0	2.6	0.0	--	3
Layng Creek R.S.	22F13	1200	3-14	0	0.0	0.0	0.0	--	3

Snow Line: Approximately 2400^f

UMPQUA RIVER

Diamond Lake	22F18	5315	3-15	57	16.0 ^a	36.9	19.9	--	13
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ROGUE RIVER

Siskiyou Summit	22G20	4630	3-17	14	3.1	14.5	1.0	--	3
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KLAMATH LAKE BASIN

Quartz Mtn. (COPCO)	9	5504	3-15	8	2.6	10.0	6.0	6.1**	25
Quartz Mountain	20G6	5320	3-15	7	2.5	No previous record			
Bly Mountain	21G5	5090	3-15	5	1.1	No previous record			
Lake of the Woods	22G15	4960	3-15	18	5.7	20.4	12.4	--	5

GOOSE LAKE BASIN

Quartz Mtn. (COPCO)	9	5504	3-15	8	2.6	10.0	6.0	6.1**	25
Quartz Mtn.	20G6	5320	3-15	7	2.5	No previous record			

^aTelegraphic

^bPartly estimated.

**Average is for less than 15 years of record in the 1938-52 period but not less than 5 years.

CURRENT OREGON STREAMFLOW^a

<u>BASIN, RIVER and STATION</u>	Streamflow in Thousands of acre-feet			
	<u>Oct. 1956 - Mar. 1957</u>		<u>Mar. 1957</u>	
	Total	As percent of 1938-52 average	Total	As percent of 1938-52 average
<u>UPPER COLUMBIA DRAINAGE (Lower Snake in Oregon)</u>				
Owyhee Res. net inflow	440.0	155	196.0	151
<u>LOWER COIUMBIA DRAINAGE</u>				
Umatilla R. nr. Umatilla	209.0	94	99.0	140
John Day R. at Service Cr.	618.0	105	350.0	149
Deschutes R. at Moody	2380.0	111	621.0	139
Hood R. and conduit nr. Hood R.	408.0	88	113.0	133
Willamette R. at Salem ^b	12110.0	96	4150.0	186
Willamette R. at Albany ^b	7895.0	104	2745.0	199
M.F. Willamette R. below North Fk.	1425.0	113	411.0	173
<u>OREGON AND CALIFORNIA COAST DRAINAGE</u>				
Umpqua R. nr. Elkton	4270.0	102	1350.0	167
Rogue R. at Raygold	1705.0	130	557.0	204
Upper Klamath Lake net inflow	1105.0	159	345.0	227

^a Preliminary data supplied by: U. S. Geological Survey, Current Records Center, Portland, Oregon; The California Oregon Power Co., Medford, Oregon; and North and South Boards of Control, Owyhee Project, Nyssa, Oregon.

^b Streamflow adjusted for storage in those of the following reservoirs which are above the station: Lookout Point, Detroit, Fern Ridge, Cottage Grove and Dorena.

OREGON PRECIPITATION^a

DRAINAGE DIVISIONS	FALL		WINTER	
	Sept.-Oct.-Nov. 1956 Observed	Departure ^b	Dec.-Jan.-Feb.-Mar. 1956-'57 Observed	Departure ^b
Southeastern	3.41	+0.57	5.70	+0.68
Blue Mountains	3.68	-1.69	9.02	-0.10
Wallowa Mountains	4.04	-1.88	8.97	+0.42
Lower Columbia	2.65	-2.58	9.88	+1.00
Upper Deschutes	2.62	-1.29	6.14	-0.55
Willamette Valley	12.21	-4.24	27.91	-0.65
Southwestern	6.90	-0.45	15.11	+0.47
South-Central	3.76	+0.12	6.67	+0.01

Southeastern - Owyhee and lower Malheur drainages.

Blue Mountains - Upper valleys of the Umatilla, John Day and Malheur, and the Powder, Burnt and Silvies drainages.

Wallowa Mountains - Imnaha, Wallowa and Catherine drainages.

Lower Columbia - Lower valleys of the Walla Walla, Umatilla, John Day and Deschutes, and the Hood and Sandy drainages.

Upper Deschutes - Upper Deschutes and Crooked drainages.

Willamette Valley - All Willamette drainages.

Southwestern - Umpqua, Rogue and Williamson drainages.

South-Central - Sprague, Lost and Interior Basin drainages.

^a - Preliminary analysis furnished by U. S. Weather Bureau.

^b - Departure from 15-year (1938-52) drainage division average.

Note- Precipitation shown in inches.

The following organizations cooperate in the Oregon snow survey work:

STATE

Idaho Cooperative Snow Surveys
Nevada Cooperative Snow Surveys
Oregon Agricultural Experiment Station
Oregon State Engineer and corps of State Watermasters
Oregon State Highway Engineers
Soil Conservation Districts of Oregon

FEDERAL

Department of Agriculture
Cooperative Extension Service
Forest Service
Soil Conservation Service
Department of Commerce
Weather Bureau
Department of the Interior
Bonneville Power Administration
Bureau of Reclamation
Fish and Wildlife Service
Geological Survey
Indian Service
National Park Service
Department of National Defense
Army Engineer Corps

PUBLIC UTILITIES

California-Pacific Utilities Company
Pacific Power and Light Company
Portland General Electric Company
The California Oregon Power Company

MUNICIPALITIES

City of Baker
City of La Grande
City of The Dalles
City of Walla Walla

IRRIGATION DISTRICTS

Associated Ditch Companies
Central Oregon Irrigation District
Deschutes County Municipal Improvement District
East Fork Irrigation District
Grants Pass Irrigation District
Jordan Valley Irrigation District
Lakeview Water Users, Incorporated
Medford Irrigation District
North Board of Control - Owyhee Project
North Unit Irrigation District
Ochoco Irrigation District
Rogue River Irrigation District
South Board of Control - Owyhee Project
Talent Irrigation District
Vale-Oregon Irrigation District
Warmsprings Irrigation District

PRIVATE ORGANIZATIONS

Amalgamated Sugar Company
The Crag Rats, Hood River, Oregon



Federal - State - Private

COOPERATIVE SNOW SURVEYS

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Furnishes the basic data
necessary for forecasting
water supply for irrigation,
domestic and municipal water
supply, hydro-electric power
generation, navigation,
mining and industry

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“WATER IS THE WEST’S GREATEST RESOURCE”